

THE MULTIMEDIA MAC: READY FOR PRIME TIME?

Macworld

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The Mac Product Experts

32 Best Mac Products



A collage of various Mac products including a desktop computer tower, a flat-panel monitor displaying a video call, a keyboard, a mouse, a printer printing a photo, and a digital camera.

» Our Editors' Picks

The Hottest Hardware and
Most-Innovative Software



REVIEWED G5 QUAD

Two Dual-Core Chips Set Speed Record



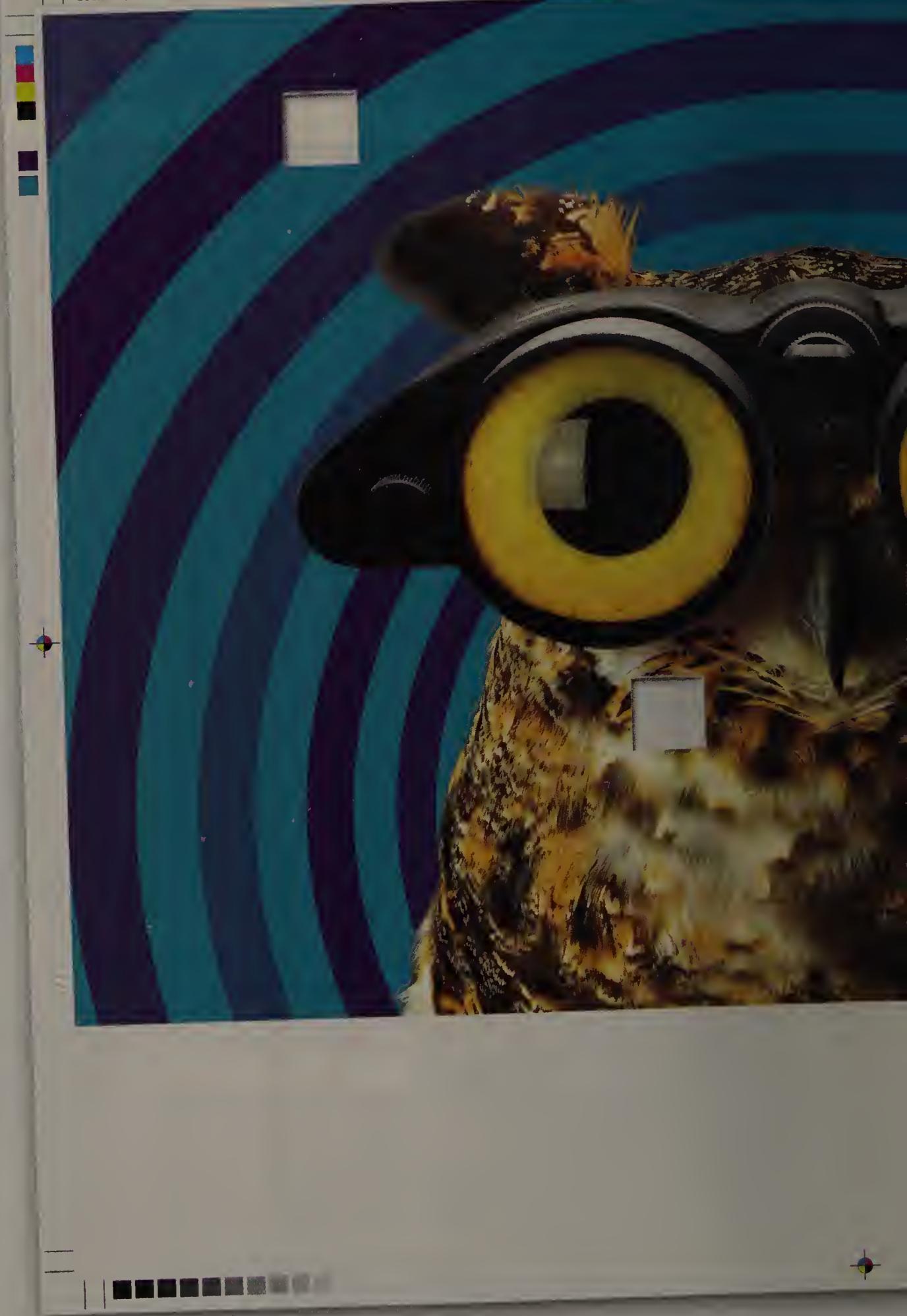
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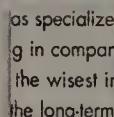
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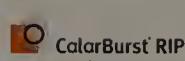
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Macworld

COVER STORY

73 The 21st Annual Editors' Choice Awards

Macworld's editors have picked the best products of 2005. Plus, see which products our readers love the most.

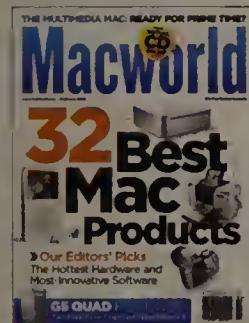
FEATURE

60 The Multimedia Mac

First there was the iPod. Then there was the iPod with video. Now Apple, with its latest generation of iMacs, its new remote controls, and its Front Row software, is taking yet another step into a future where music and video matter just as much as—if not more than—traditional computing. How bright does that future look? Our experts find out.



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PETER COHEN

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DAN FRAKES

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iFashion iFunction iDiddy

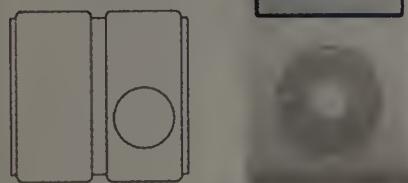
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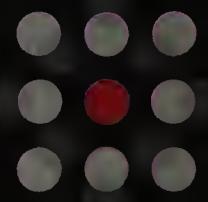


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Apple TV

Every time we write a story about the iPod, we get inundated with e-mail messages from readers demanding that we stop wasting valuable paper and ink on Apple's popular music player. (See this month's *Feedback* [page 16] for the latest.) I agree with one point many of those correspondents make: the name of this magazine isn't *iPodworld*.

But I don't think we cover the iPod too much. It's the hottest consumer product in existence, but if you accept the idea that the iPod is a Mac accessory (and I do), it's the most popular one on the market today. That's reason enough for *Macworld* to cover it extensively.

Still, I understand the complaints: yes, we, along with the rest of the world, are abuzz about the iPod. What about the poor, neglected Mac?

Here's the thing, though: with the new iMac G5 (complete with remote control and Front Row software) and the new video iPod, both announced on the same day, the Mac-iPod relationship has turned a corner. Because when it comes to transforming home entertainment, the iPod isn't enough. The Mac is going to have to get in the game, too.

To the Couch, Potatoes!

When it comes to making the Mac the center of a home-entertainment hub, Apple has so far taken only baby steps. As we detail in "The Multimedia Mac" (page 60), the new iMac is hardly the be-all and end-all of home entertainment. And as I found out in reviewing the new iMac for last month's issue, its Front Row media interface is a great idea but is in need of some serious refinement.

Although Apple's multimedia strategy is still in its infancy, it's possible to speculate about where it's headed. (Let me say right now that writing a column predicting Apple's next move is almost always a losing proposition. But here goes.)

Start with a recap: Apple introduces video-playing iPod. Apple introduces video section of the iTunes store. Apple introduces a Mac with a remote. Front Row will improve. So what's left? A Mac-compatible device that attaches to your TV and serves up media while you're sitting on the couch.

Either this device will be a Mac or it'll rely on a Mac somewhere in your home to provide it with iTunes music and videos, iMovies, photos, and who knows what else. Presumably, it will have an improved version of Front Row.

And let's hope that this new device either talks natively to cable and satellite boxes and records TV shows or supports add-on TV technology fully integrated into that friendly Front Row interface.

A Tough Road Ahead

Apple's success with the iPod has been amazing. But the iPod was introduced into a market full of lousy products. Even now, the iPod's competitors are remarkably uninspired.

That's not the case in the video market. Microsoft's early Media Center PCs were laughably bad. (Why yes, I *do* want to use a mouse and keyboard from my recliner; thanks for asking!) But they've improved a whole lot in the past three years. The latest Media Center PCs have slick remote-driven interfaces, built-in TV tuners, and support for remote "extenders" that let every TV in your house have access to all the media stored on the PC. Apple's got a lot of catching up to do.

Yet I'm confident that Apple can be a major player in the home-entertainment world. The iPod has proved that Apple understands what real people want from their consumer electronics devices. Any new Apple media devices will undoubtedly work seamlessly with the iPod, making them appealing to millions of iPod addicts. And the Mac has the computing power and built-in media savvy to be the device at the center of it all. I sure wouldn't bet against Apple. Would you?

Best of the Best

Elsewhere in this month's *Macworld*, you'll find our 21st annual Editors' Choice Awards. This year, we honor 32 of the best Mac products released in the past 12 months.

I've been a part of the Eddys for 12 years now, and the unflagging quality of the products released in the Mac market never ceases to amaze me. Apple came through with some truly cool hardware, as well as Automator, the fantastic workflow-automation technology built into Tiger. Smaller companies continue to bring out mind-boggling products such as Plasq's Comic Life and Delicious Monster's Delicious Library—stuff we never knew we needed but now can't live without. You'll find a complete list of the winners, and testimonials from our editors on why we picked them, beginning on page 73. □

What do you think of Apple's multimedia strategy? Do you agree with our Eddy picks? Let me know in our forums (macworld.com/forums), or send an e-mail to jason_snell@macworld.com.

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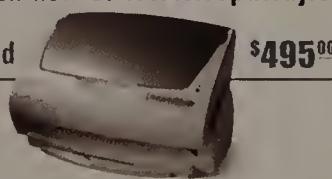


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Is Firefox the Best?

PARRISH S. KNIGHT

One of the main reasons I subscribe to *Macworld* is that you are almost always right on the nose in your reviews. Unfortunately, you really missed the mark with your high praise for Mozilla's Firefox (4½; *Reviews*, November 2005). Firefox is a terrible browser. For starters, it can't use many OS X services. I particularly rely on two such services in Apple's Safari—spelling checks and autofill of contact information from my Address Book. Firefox requires separate plug-ins to do the same things. Also, it doesn't interact as well as Safari does with other OS X applications. In Safari, I can highlight text on a Web page and then use services to compose an e-mail message with the selected text as its body, to search in Spotlight for the highlighted text, to create a Stickies note containing the highlighted section, and to do all sorts of other things. In Firefox, I can't. Safari is also fully scriptable with Apple-Script; Firefox isn't. And don't get me started on Firefox's interface. The radio buttons, the check boxes, and even the windows themselves have a clunky, old-school appearance. In Safari, each tab has its own close button. In Firefox, the entire browser window has just one close button for all the open tabs; that means you have to switch to a tab before you can close it. True, Firefox can use extensions to overcome some of these problems. But why reinvent the wheel?

DEREK VAN LOON

After reading your review of Web browsers, I tried Firefox for three days. I really wanted the program to work out, but, sadly, I found that it offered more problems than solutions. Way too

many sites (including Apple.com and Hotmail.com) just didn't work properly. It's too bad, because I really like the extensions and add-ons. For now, while I'll keep trying Firefox at home, I'll be using Safari or Microsoft Internet Explorer at work, where I need to be productive. Firefox is an excellent start, but it's far from the complete Safari alternative you described in your article.

VICTOR F. GORODINSKY

One small comment about Jeffery Battersby's review of Web browsers: he talks about Mozilla's Firefox and Camino, but why doesn't he mention the Mozilla browser itself? I use it sometimes, and it's a very decent program. One thing it has that Firefox lacks is the ability to create Web pages, thanks to Composer. I find that feature very useful.

More iPod-Hatin'

STEPHEN LEONARD

It has been said before, but you're devoting several orders of magnitude too much of your magazine to iPods. Yes, they're cute and clever. Yes, they're making gobs of money for Apple, which is good. But they have little or nothing to do with using a Mac computer, which is what your readers turn to your magazine for. Devoting the cover, and several pages, of the November issue to iPods shows a seriously flawed perspective in your editorial suite. Get back to covering issues related to computer use. Leave iPods, cars, cooking, airplanes, gardening, golf, and lingerie to other magazines.

CHARLES HATCH

I was shocked to read the fine print in your story about the new iPod nano

(*Mac Beat*, November 2005). Why would Apple not allow the nano to sync over FireWire, like my mini? My eMac doesn't have USB 2.0, so I've been using a dock-to-FireWire cable to sync my iPod. The nano looks cool, but I can't use it if I can't hook it up.

Better Blogging

STEVE STASKIEWICZ

I noticed a glaring omission in your story about blogging tools for the Mac ("Spinning a Better Web," November 2005). It made no mention of Ecto (\$18; ecto.kungfoo.tv), the excellent tool built for the Mac (and for Windows, too, but I'll forgive them for that). This program works with a wide variety of blogging platforms and makes posting and editing a snap.

Adobe Responds

CHAD SIEGEL

(PRODUCT MANAGER, ADOBE)

Galen Gruman's review of Adobe InCopy CS2 raised interesting points about how InCopy works, but it didn't effectively communicate the problem InCopy is trying to solve (4½; macworld.com/0770). InCopy isn't intended to address file versioning between designers and editors in complex publishing workflows, as his introduction suggests. Instead, InCopy tries to streamline the workflow between designers and editors in small creative teams by allowing them to work in parallel on the same layout. With InCopy, editors no longer have to write blindly and then adjust their copy once it is placed in the design, nor do editors and designers have to pass paper proofs back and forth in rounds of corrections. Instead, multiple editors can access assigned con-

continues



I'M A LOSER

I lose hours of my life every week waiting for hard drives. Save. Copy. Delete. I need more space. And I need to get to it fast. Can someone please make a backup and storage solution that I don't have to think about? That'd be **GOOD THINKING.**

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tent directly within an InDesign layout and then write to fit in the Layout view or in a choice of text views. Meanwhile, the designer can continue working in parallel on the layout. InCopy CS2 cost-effectively brings some of the power and productivity of expensive, high-end editorial systems to smaller creative teams, so they can collaborate more efficiently on content while enhancing quality.

Note that several clarifications were made to this review in light of Adobe's comments. None of the clarifications affected the mouse rating or our overall buying advice for InCopy CS2.—Ed.

CDMA = No Bluetooth?

CHRISTIAN RAMOS

I feel obliged to point out a big piece of misinformation in your November *Mobile Mac* ("Get Online with a Cell Phone"). You stated, "If you have a CDMA cell phone [...] you may not have Bluetooth." In reality, Bluetooth has been available on CDMA-carrier phones for over a year now.

Doctor, My Eyes

JERRY KING

I have to write about the presentation of the information in your magazine. On pages 54 and 55 of your November issue, you have a sidebar, "Extending Safari," running across the bottom of the pages. The background for the sidebar is dark blue-purple. The title is orange, so it's readable. The main text is white and is also readable. The illustrations are gray and visible. But the URLs in the article appear in a blue that's just slightly different from the background color. Please have your editors check layouts more closely for readability.

SHIRA HANNAH FISCHER

The cover of the November issue showed an iPod nano playing exactly the same song, and at the same place in the song, as the inside cover's Apple advertisement. Why? When your cover art comes from Apple, it makes me wonder how objective your review really is.

It's difficult to photograph the iPod and make what's on screen clear and readable;

however, in the case of November's cover, we took our own photograph of the nano (rather than use one supplied by Apple) at the last possible minute. Purely because of our deadlines, we had to use Apple's supplied nano screen image. We prefer not to use images supplied by Apple. But sometimes, because of time or product-availability constraints, it's unavoidable.—Ed.

CORRECTIONS

In January's Mac Gems column, the rating for iFlash was wrong. It should have been .

Post comments on our forums (www.macworld.com); send them by mail to Letters, Macworld, 501 Second Street, 5th Floor, San Francisco, CA 94107; or send them by e-mail to letters@macworld.com. Include a return address and daytime phone number. Due to the high volume of mail we receive, we can't respond personally to each letter. We reserve the right to edit all letters and posts. All published letters and forum comments become the property of Macworld.



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Versatile, Powerful and Friendly

FileMaker Pro 8 proves its worth in businesses

"YOU NEED TO MAKE A LOW-END unit, an economy model. There's a good market for them."

That was the word that came down from Mark Pilger's distributor network. As president of SIP Corp. in Tampa, which produces sharpening equipment for golf course mowers, he had to figure out whether his small manufacturing firm could actually produce a low-end reel grinder and do so profitably.

The answer came from a trusted old friend: FileMaker® Pro, from FileMaker, Inc. Utilizing a bill of materials and inventory database that Pilger, a non-programmer, had built using FileMaker, he was able to quickly see which items represented the biggest expense in making a low-end model. He then calculated other expense models incorporating engineering changes, and within a week he had his prototype. Within months, his new reel grinder was in production and shipping to golf courses around the globe.

"I cannot overemphasize what an exceptional product FileMaker Pro is. This is a business solution that allows us to do very sophisticated things without being sophisticated."

The screenshot shows a software application window titled "TravelRock Inc." with a sub-section titled "Adventure:detail". The main content area displays an "Amazon Adventure" record with the following details:

- Title:** Amazon Adventure
- Focus:** Wildlife / Photography
- Price:** \$1,852
- where:**
 - Country: Brazil
 - Region: South America
- when:**
 - Season: Spring
 - Days: 16
 - Nights: 15
- Info:** Includes a table with the following data:

Category	Value
Distance covered	44
Elevation delta	1,750
Elevation max	2,000
Activity level	3
Participant limit	15

Below the main record, there is a note about environmental concerns regarding deforestation in the Amazon Rainforest, mentioning the loss of biodiversity and global warming.

Productivity Engine

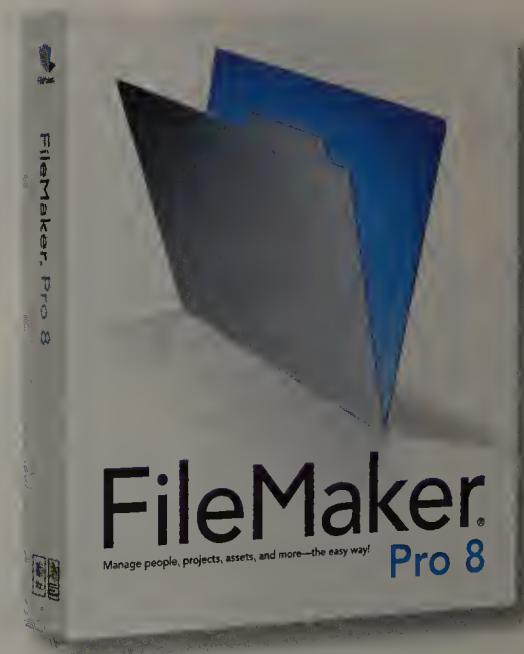
For Pilger and tens of thousands of small businesses, FileMaker Pro is the ticket to enhanced productivity, reduced costs, and greater overall success. And the new and improved features in FileMaker Pro 8 hit the sweet spots that give small businesses the functionality and agility that used to require an IT staff.

With FileMaker Pro 8, Pilger has taken advantage of the solution's ability to duplicate scripts, tables, and fields to rewrite his database "in a small fraction of the time it would have taken previously. Now I just cut and paste—a huge time savings."

Pilger also appreciates the integration built into FileMaker Pro 8 with Microsoft Office programs, such as Excel. "With new product development, we took our bill of materials created in FileMaker and downloaded it instantly to Excel because it is easier to manipulate the data there. We really leveraged the power of Excel with data from FileMaker Pro."

Heretofore, Pilger was using separate software for his key accounting applications, but that package does not do a good job of labor tracking—and labor tracking is crucial for controlling costs in manufacturing. Now Pilger is incorporating his accounting functions in FileMaker Pro 8, which will immediately eliminate double entries of inventory and other data.

Easily create your own custom solutions to track and manage all types of data with FileMaker Pro 8.



"It's extraordinary for someone like me to create such a sophisticated database without any programming experience."

-Mark Pilger, president, SIP Corp

"I am not a programmer, but I can develop like one with FileMaker Pro," concludes Pilger. "It's extraordinary for someone like me to create such a sophisticated database without any programming experience."

Time Saver

At first glance, you might not think Pilger's operations have much in common with the College of Arts & Sciences' Student Records Office at Syracuse University. But that is where you would find another non-programmer, Ann Marie McGinnis, who has also built highly sophisticated databases that have saved the university big

How FileMaker Pro 8 can boost productivity and drive real bottom line benefits for your business

- ✓ **Boost** productivity for employees and customers alike who view FileMaker Pro information by creating easy-viewing Adobe PDF files with the new *PDF Maker*.
- ✓ **Produce** Excel files for data analysts in-house or for your suppliers or customers.
- ✓ **Perform** e-mail merge to send personalized messages to customers.
- ✓ **Save** even more time by instantly emailing the contents of any field in a FileMaker Pro database with the new *FastSend* feature.
- ✓ **Control** your inventory and downstream manufacturing processes.
- ✓ **Automate** the creation of client proposals filled with rich data and then quickly and easily web publish these proposals for instant review by the client.
- ✓ **Eliminate** cumbersome, expensive, and fragile paper forms once and for all.
- ✓ **Use** the new *Tab Control* to save hours building layouts; now it's just a single step.
- ✓ **Manage** customer contact information by giving employees instant access to all contact details, exploiting FileMaker Pro 8's *Fast Match* feature that lets users quickly search data without the time-consuming burden of typing.

"I found it easy to learn FileMaker Pro on my own to streamline the many complicated tasks of my office, helping staff be more efficient and productive."

-Ann Marie McGinnis, Director of the Student Records Office, Syracuse University

the many complicated tasks of my office, helping staff be more efficient and productive."

Built to Last

FileMaker Pro 8 has similarly found a welcome home at award-winning AR7 Hoover-Desmond Architects in Denver,

which specializes in innovative design for public schools and universities. Matthew Edmonds, Job Captain, has leveraged FileMaker Pro's power and intelligence to fully digitize processes that formerly were bogged down in manual procedures.

Because AR7's projects routinely generate thousands of pages of documents and large, complex image files, accessing them has to be very fast, particularly when a client or contractor needs information. Edmonds, yet another non-programmer, built a FileMaker Pro database that uses key words and related tables to instantly search for any document, drawing, or other data.

Edmonds says AR7 is making significant use of the PDF maker to route information around the firm and to clients and contractors in an easy-to-visualize format. He also applauds the timesaving capability to cut and paste layouts and tables from file to file.

"We have found the numerous, freely downloadable sample Filemaker database templates to be one of the most important learning resources," Edmonds says. "Combining these solutions with FileMaker's great online support and sites such as FMforums.org is a huge plus for us. It has saved us valuable time which of course equates to real money."

SIP Corp., Syracuse University, and AR7 architects: three very different organizations that have each reaped measurable rewards from FileMaker Pro 8.

money, streamlining what used to be tedious, error-prone student registration processes. The glue that holds it all together is FileMaker Pro.

What McGinnis has accomplished as Director of the Student Records Office is nothing short of amazing. By personally developing the AutoReg custom application using FileMaker, she has cut the time required to complete course scheduling from 75 minutes per student under the old Oracle PeopleSoft program to *30 seconds using FileMaker Pro*—a reduction of approximately 1300 hours.

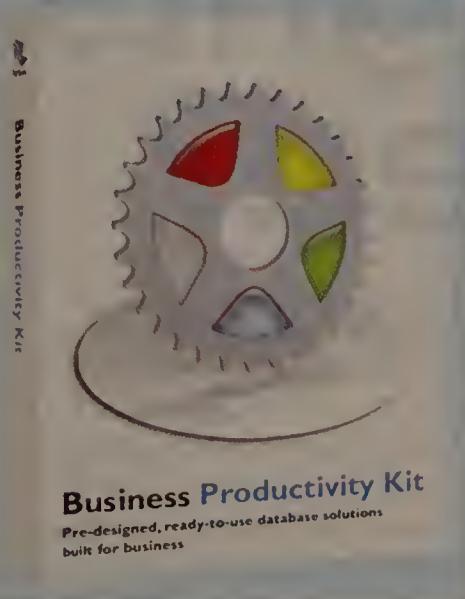
Initially McGinnis had considered using Microsoft Access for the job, but she chose FileMaker because she needed her application to support both PC and Macintosh environments. With each new version of FileMaker Pro, McGinnis has added more features, functionality, and overall value to AutoReg, most recently creating a new interface called iPlan.

iPlan leverages the PDF maker in FileMaker Pro 8 to allow students to communicate quickly and effectively with faculty. This will allow incoming students to query professors, with the queries showing up in PDFs that get instantly emailed to faculty. Student iPlan reports, as well as other vital student data, are also automatically converted to PDF format.

But it is when talking about FileMaker Pro 8's ease of use that McGinnis really beams. "The program's script-making makes even the most daunting tasks fairly easy," she says. "I found it easy to learn FileMaker Pro on my own to streamline

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You can experience the real business benefits of FileMaker Pro 8 for yourself at absolutely no cost or obligation by downloading FileMaker's 30-day free trial offer at www.filemakertrial.com/sb. This trial offer comes fully loaded with the Business Productivity Kit, which is a set of ready-to-use essential business database solutions designed to immediately boost small businesses' productivity and profits.



macbeat

[WHAT'S NEW] [WHAT'S IN THE PIPELINE] [WHAT'S HOT]



Your Rights Reserved?

The Copy-Protection Battle Will Shape Apple's Multimedia Future

BY GLENN PEOPLES

With its video-capable iPod and a new iMac designed to double as a home entertainment system, Apple is quickly becoming as much a multimedia company as a computer vendor. It has

already sold more than 600 million songs and more than 28 million iPods, and it passed the one-million-videos-sold mark less than 20 days after making video available at the iTunes Music Store (iTMS).

But behind that transformation lurks the particularly sticky issue of digital rights management (DRM). DRM is designed to protect the rights of content owners—musicians, record labels, movie studios, and the like. But it can collide with the desires of consumers who want to enjoy the music and videos they buy whenever and wherever they want. Can Apple keep both its media partners and its media consumers happy? The answer will define its future as a company.

Behind the Music

From the day the iTunes store arrived, everything Apple has sold there has been governed by the FairPlay DRM system. Apple allows you to play a song you've bought at the iTMS on up to five com-

puters, as well as transfer music files to an unlimited number of iPods and iTunes-enabled phones, and burn those songs onto audio CDs. Those restrictions were among the conditions set by record companies before they'd let Apple sell their songs. Understandably, those companies didn't want an iTunes user to be able to buy a song once and then share it willy-nilly with friends, or the world, via the Net.

Apple's DRM regime is relatively benign—most casual users probably don't even notice the restrictions—but the company has come under fire for refusing to license FairPlay to other companies. Among other things, this means that digital music players from companies such as Roku, Slim Devices, and Sonos can't legally play iTunes files without Apple's permission—and Apple won't give it.

Likewise, Apple has resisted Real-Networks' Harmony technology, which uses Apple's FairPlay DRM to protect songs bought from Real's online store. In response, Apple likened Real to "a hacker" and released an iPod software update that disabled Harmony support. Real responded to that with an update to Harmony that restored iPod compatibility. Another company, Navio Systems, has also recently declared its intention to reverse-engineer FairPlay in order to allow online stores to copy DRM-encoded files to the iPod.

Apple isn't the only online music vendor to implement copy-protection. Others—such as Napster and Yahoo's Musicmatch—use the Windows Media DRM format to protect their music. Files encrypted in that format can be burned to CDs and transferred to portable music players. But as with Apple, certain restrictions apply—Napster, for example, lets you play purchased music files on three computers, burn playlists seven times, and transfer to as many compatible MP3 players as you want (but not, of course, to an iPod). Since these services require a version of Windows Media Player that supports DRM files, Mac users can't use these other music stores—there is no such software for Macs.

On the Record

Recently, some major record labels have started to employ software that limits your ability to copy or transfer music files after

you've ripped them from an audio CD to your hard drive. Unfortunately for Mac users, and for iPod users on both sides of the OS divide, no copy-protected CD on the market is designed to let you convert the music to a format that works in iTunes and on the iPod.

Even worse, Sony BMG Music Entertainment recently ignited a huge controversy when it was revealed that many Sony CDs installed low-level, hidden copy-protection software on PCs. In just three weeks, the controversy went from blogs to lawsuits. It turned out that the software opened some gaping security holes on users' computers and even impacted performance. What was supposed to be "a speed bump . . . to slow down people from copying CDs," says Kurt Opsahl, staff

only so far. As a result, Apple needs to rely on its DRM in order to make deals with large media companies such as NBC Universal. (Apple recently added several TV shows from the conglomerate, including *Battlestar Galactica*, *Dragnet*, *Law & Order*, and *Monk*.) As Apple seeks to offer more video content via iTunes and on its hardware, media companies will continue to insist on ways to protect that content from piracy.

At the same time, with industry gaffes such as Sony's hitting the mainstream media, consumers are beginning to understand that DRM technologies can benefit the people who sell products at the expense of those who buy them. "The remedy will come from the marketplace," MP3.com's founder, Michael

DRM protects content owners but frustrates consumers.

attorney for the Electronic Frontier Foundation (EFF), a nonprofit civil-liberties organization that opposes DRM, "turned out to be more of a land mine." The Texas attorney general announced a lawsuit against the maker of the Sony software, for violating the state's anti-spyware laws; soon thereafter, the EFF sued Sony BMG over what it called a "flawed and over-reaching computer program in over 20 million CDs."

The Video Connection

FairPlay also governs the video content that's now available via iTunes, such as TV shows. Unfortunately, that content is even more restricted than music: you can't burn it to DVD. But that's not the only barrier copy-protection throws in front of video consumers. Most commercial DVDs and DVD players include a region-coding system that restricts the playback of legally purchased discs to certain parts of the world. And anyone who writes software that lets you convert commercial DVDs to a format playable on an iPod is subverting a DVD's built-in encryption and therefore breaking the law.

The Future

Although Apple's DRM is among the least restrictive and most consumer-friendly in the industry, the company's influence goes

Robertson, wrote on his blog. Robertson suggests that consumers will rebel against proprietary formats controlled by companies (including Apple and Microsoft) that want to restrict consumers to a select group of stores and playback devices.

The EFF's Opsahl suggests that people will think twice before buying copy-protected audio CDs. And if DRM practices become a drag on music sales, recording artists will quickly begin to complain that their careers are being harmed by their labels' copy-protection schemes.

Although the Sony CD fiasco has given the DRM industry a black eye, it would be naïve to think that the era of copy-protection technology is nearing its end.

Most iTMS customers are fairly content within its walled garden. The music plays on their Macs, plays on their iPods, and can even be burned onto CDs. And for many people, that's enough. But the more complicated the world of digital media becomes, the more often users will begin to hit the limitations of DRM. Whether consumers' ability to play their music and video will become more or less restricted will have a lot to do with how frustrating those limitations become.

GLENN PEOPLES is the founder and editor of Coolfer (www.coolfer.com), a blog that covers the music industry and how it is being shaped by technology.

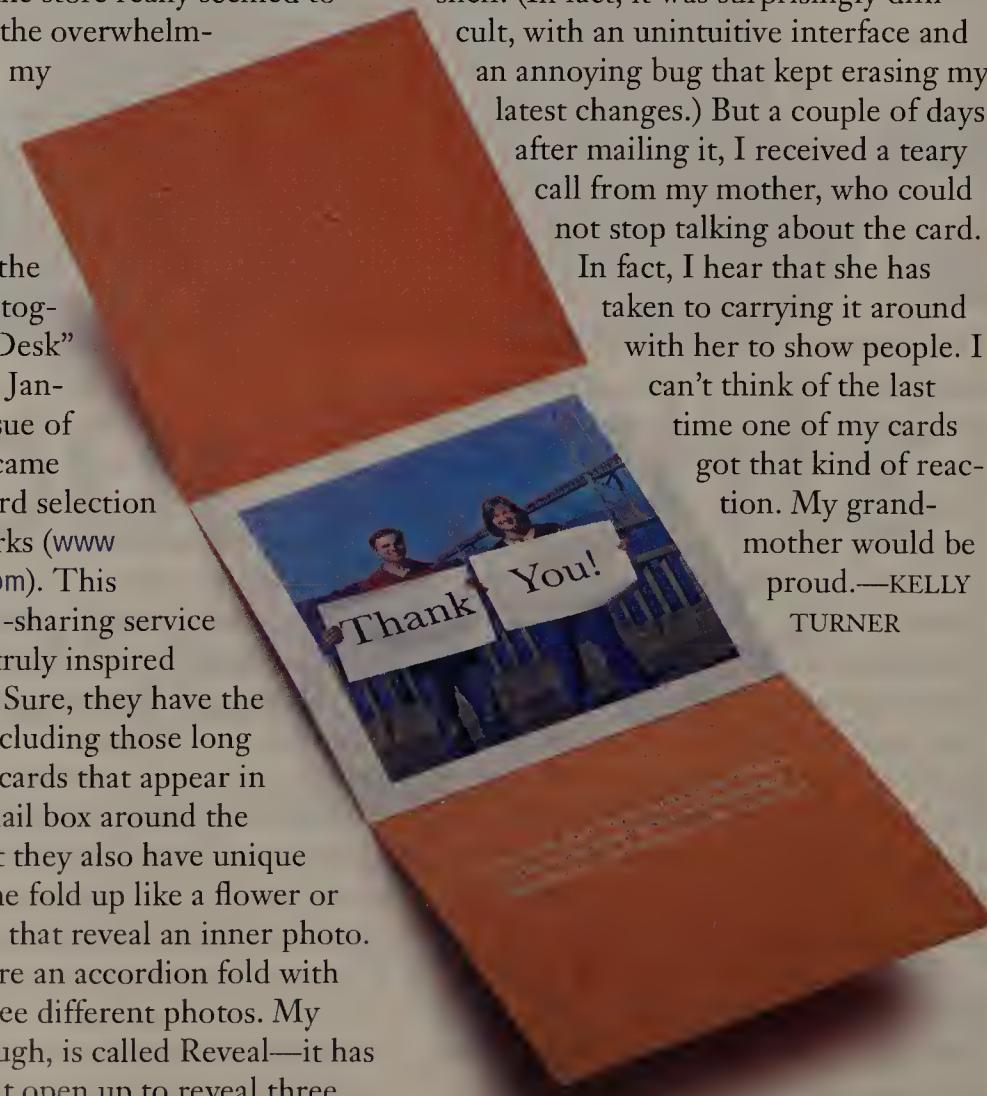
ONLINE PHOTO SITE PROVIDES THAT PERSONAL TOUCH

Custom Thank You Card

When I was a kid, my grandmother worked for a greeting card company. Her job was to go into the stores and make sure the cards were up-to-date, well stocked, and correctly displayed. I used to accompany her on some of these trips, and we'd spend what seemed like hours wandering through store aisles lined with every kind of paper wonder imaginable.

If I learned anything from these outings with my grandmother, it was that not all cards are created equal. And truly special sentiments require a truly special card. I got married recently, and I started looking around for thank you cards. Well, one thank you card in particular—something for my mother. She had gone above and beyond the call of motherly duty, by staying up until the wee hours of the morning for nearly a week to help us get ready for our wedding. But nothing I saw in the store really seemed to do justice to the overwhelming gratitude my husband and I felt.

While I was doing research for the “Digital Photography Help Desk” article in the January 2006 issue of *Macworld*, I came across the card selection at PhotoWorks (www.photoworks.com). This online photo-sharing service offers some truly inspired photo cards. Sure, they have the standards, including those long 4-by-8-inch cards that appear in everyone’s mail box around the holidays. But they also have unique designs. Some fold up like a flower or offer cutouts that reveal an inner photo. Others feature an accordion fold with room for three different photos. My favorite, though, is called Reveal—it has two folds that open up to reveal three different messages and a photo.



These cards aren't inexpensive. One of them can cost as much as \$4, depending on the design you choose (there are volume discounts). And if you select a square card, you'll have to use additional postage when you mail it off. But the “wow” factor is huge.

For our thank you note, I set up my tripod and took a picture of my husband and me holding large pieces of cardboard at the same spot we took our wedding photos. I then used Adobe Photoshop to add the words *Thank You* to the signs in our hands. I uploaded the file to PhotoWorks’ Web site, wrote a personalized note that stretched over each of the three text panels, and then had the site mail the card to me so we could sign it before sending it off.

Sure, it was more work than walking into a store and picking a card off the shelf. (In fact, it was surprisingly difficult, with an unintuitive interface and an annoying bug that kept erasing my latest changes.) But a couple of days after mailing it, I received a teary call from my mother, who could not stop talking about the card.

In fact, I hear that she has taken to carrying it around with her to show people. I can't think of the last time one of my cards got that kind of reaction. My grandmother would be proud.—KELLY TURNER



MULTIMEDIA BEAT

EyeTV 1.8.4, from Elgato Systems (www.elgato.com): Update to TV-recording software adds one-step export to video-capable iPods (\$79; upgrade, free).

Hypersonic 2, from Steinberg (www.steinberg.de): New version of the music workstation features 1.7GB of sounds, 1,800 factory presets, and four sound-generation engines (\$399; upgrade, \$129).

HyperTranscribe 1.0, from ResearchWare (www.researchware.com): Transcription software for audio and video files lets users play, pause, and loop media for easy transcribing (\$99).

iKey, from Gemini Sound Products (www.ikey-audio.com): Portable USB-based recorder lets users record live audio and convert it into MP3 files directly on an iPod (\$230).

iMedia Center, from SkipJam (www.skipjam.com): Universal audio-video hub adds iPod support, letting users download TV programs and FM recordings directly to their iPods (\$799).

Radio Shark 2.0, from Griffin Technology (www.griffintechnology.com): Updated software for powering the \$70 Radio Shark receiver features improved 10-band equalizer, expanded record and playback tuning and appearance preferences, and improved scheduling (free).

SmartMusic 9.0, from MakeMusic (www.smarmusic.com): Practice program for students of woodwind, brass, string, and vocal adds a jazz repertoire created by Wynton Marsalis, select musicals, and new and updated playback sounds (\$90-per-year subscription).



HARDWARE BEAT

FP93G X, from BenQ America (www.benq.us): 19-inch LCD promises a 2-millisecond gray-to-gray response time with a native resolution of 1,280 by 1,024 pixels (\$419).

IrisCard mini, from IRIS (www.irisusa.com): Mac-compatible business-card scanner lets users scan business cards in black-and-white or gray scale (\$175).

LaCie 119, from LaCie (www.lacie.com): 19-inch LCD panel features a native resolution of 1,280 by 1,024 pixels, a 1,000:1 contrast ratio, and VGA and DVI interfaces (\$429).

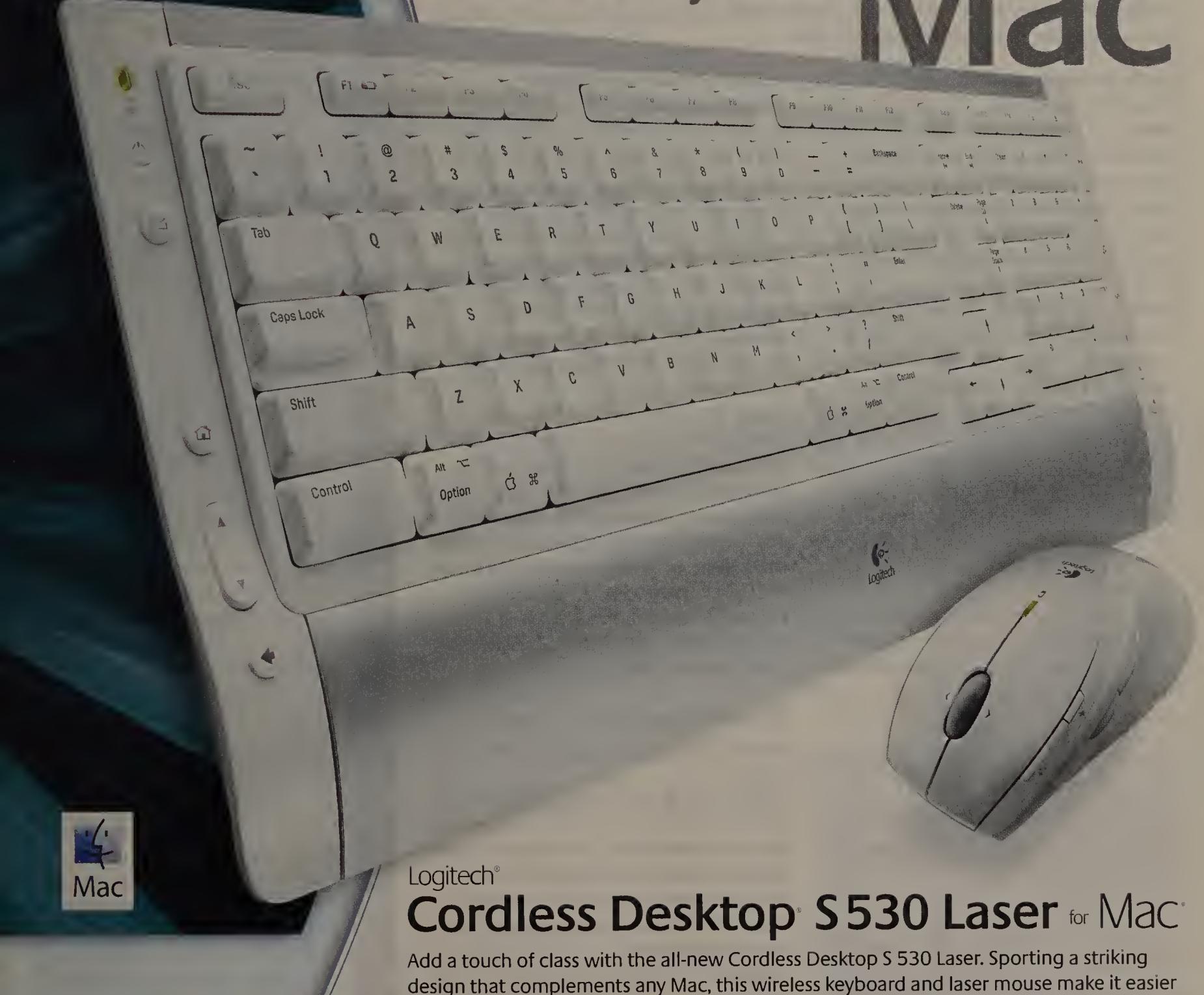
LaCie 120, from LaCie (www.lacie.com): 20-inch LCD panel features a native resolution of 1,600 by 1,200 pixels, 700:1 contrast ratio, and VGA and DVI interfaces (\$699).

PodFreq, from Sonnet Technologies (www.sonnettech.com): Integrated FM transmitter and iPod charger adds compatibility with video-capable fifth-generation iPods (\$100).

NEW

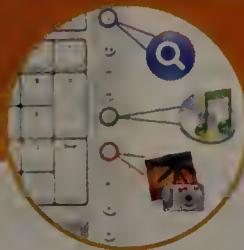


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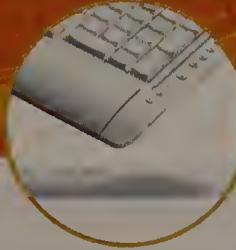
Add a touch of class with the all-new Cordless Desktop S 530 Laser. Sporting a striking design that complements any Mac, this wireless keyboard and laser mouse make it easier than ever to access your favorite applications – and look good while you're at it.



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MACWORLD'S SIXTH ANNUAL LOOK AT THE YEAR AHEAD

Fortune-Tellers

Who knows what tomorrow may bring in the Mac world? We're willing to take a guess—so we've asked Contributing Editor Adam C. Engst and Senior Editors Christopher Breen and Dan Frakes to reprise their roles as last year's prognosticators and predict the biggest news of 2006.

2006's Most Significant New Product

Breen: It'll be a robust Intel-based PowerBook. Apple's desktop Macs have managed to keep pace with PCs, but its laptops are comparatively slow, hot, and power hungry. An Intel-based PowerBook that is speedy and has good battery life will put Apple back in the game.

Engst: I said it last year, but I think we'll see something between the Mac and the iPod, a touch-sensitive, ruggedized, tablet-size device that will do everything a Mac will do, but it'll be designed for use around the house. It'll be a bit like the latest iMac, with a built-in iSight and a 14-inch screen, as well as an intriguingly clever stand so you can prop it up on a table or a desk and use it with a Bluetooth keyboard and Mighty Mouse (yes, we'll see a Bluetooth Mighty Mouse, too) instead of a stylus or a remote control.

Frakes: In terms of increasing Apple's influence in the consumer market, I'm hoping that we'll see a "media center"—a Mac mini-like box that runs a more advanced version of Front Row.

READERS WEIGH IN 12 Predictions from the Macworld.com Forums

1. Larger, wall-mountable iMac
2. PCI Express graphics, SATA II hard drives, and DDR2 memory on all Macs
3. AirPort Express with video capabilities
4. Leopard
5. Front Row for all Macs
6. iLife '06
7. True video iPod with a bigger screen
8. Blu-ray and/or HD-DVD optical drives
9. iSight built into more Macs and displays
10. New version of iWork
11. iTunes Music Store becomes iTunes Media Store
12. Bluetooth Mighty Mouse

2006's Most Significant New Software

Breen: iTunes aside—Apple's dominating role in the digital music market will continue—I'm putting my money on Windows. Up to this point, Apple has been shy about saying how Windows will relate to an Intel-bearing Mac. Though Apple and Microsoft won't officially support it, neither company will erect barriers to running Windows natively on an Intel Mac. (The same won't be said of OS X running on any Intel hardware other than a Mac, however.)

Engst: The as-yet-unnamed replacement for iTunes that will manage all your media—audio, photos, and movies—in a far more seamless fashion than iTunes does now, synchronizing with your iPod and other Macs as necessary. Either that or a new Finder that relies entirely on Spotlight, eliminating the need for a hierarchical filing system.

Frakes: A Microsoft Office-type suite from Apple that integrates Pages and Keynote with one or two other components.

2006's Biggest Mac News

Breen: I'm sticking with Windows running on the Mac.

Engst: Let's see. It's too early for Steve Jobs to step down from his CEO position to run for president of the United States, so that leaves only one possibility, brought to you by the two most prominent cultural icons of the time: the iPod and Google. Enough said—I dare not risk sharing any more details.

Frakes: The transition—fast or slow—to Intel processors.

WHEN WILL IT HAPPEN?

These questions are on everyone's minds—what do our experts think?

When will the first Intel Macs come out?

Breen: The first quarter of 2006. I wouldn't be surprised to see Steve Jobs at Macworld Expo announcing that a model is going to ship in the following month or two.



Engst: I'm willing to bet that Apple will release the first Intel Macs on a Tuesday in San Francisco. Pick your Tuesday.

Frakes: If we're lucky, we'll see something way ahead of Apple's announced schedule—Macworld Expo in January. Otherwise, I'm saying March.

What Mac model will be the first to include an Intel processor and why?

Breen: Apple dearly needs faster laptops that provide better battery life. I think iBooks and PowerBooks will boast "Intel inside" before desktop Macs do.

Engst: My money is on the Mac mini, for which Apple will always be trying to cut costs and for which performance is not paramount. Apple can then take the lessons learned and apply them next to the iBook.

Frakes: Either a laptop or a Mac mini—the G4-based Macs have been falling behind the G5 models and Windows computers in terms of performance.

How'd They Do?

All three of our fortune-tellers predicted 3GHz Power Macs and PowerBook G5s in 2005—no luck there. But let's see how accurate their other guesses were.

Christopher Breen,
Senior Editor

- Significant new version of iTunes
- Smaller iPods, wireless iPods
- Faster G5s in all Macs

Adam C. Engst,
Contributing Editor

- Tablet Mac
- Tiger
- Streaming, subscription-based option for iTunes Music Store

Dan Frakes,
Senior Editor

- Flash-based and wireless iPods
- Video on the iTunes Music Store
- More Windows users switch to the Mac

- Spot On!
- Partial Credit.
- I'm Sorry, That's Incorrect.



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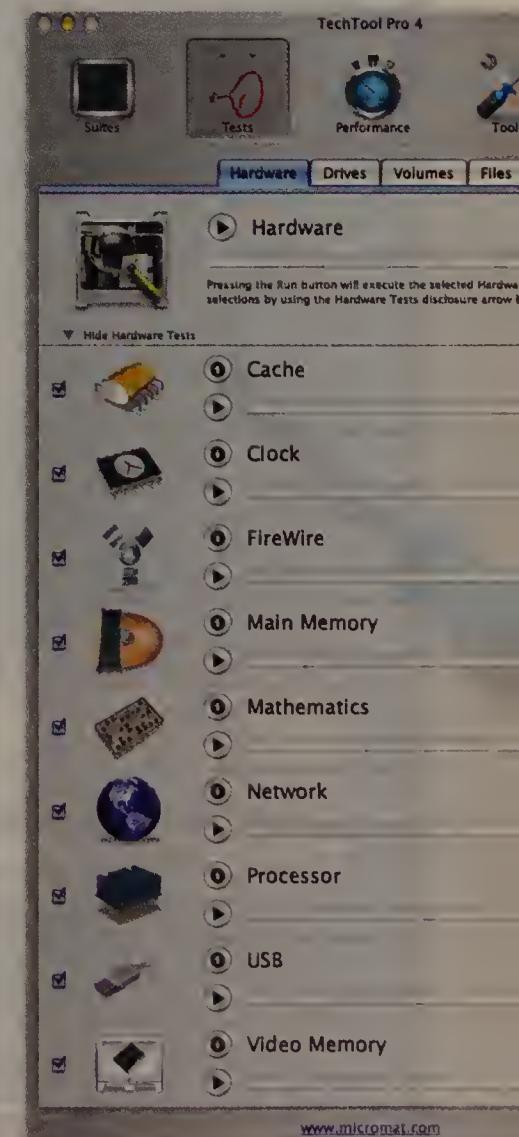
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MADONNA AND APPLE EXPERIMENT WITH GAPLESS ALBUM Uninterrupted Music



One big complaint among music aficionados when it comes to compressed AAC or MP3 files is that—due to how the files are encoded—tracks can't flow seamlessly into one another. iTunes can fake it, but the iPod can't even do that. And for classical music and albums such as *Dark Side of the Moon*, the lack of flow can be a deal breaker. Apple has taken a first step toward fixing that problem with the iTunes release of Madonna's new album, *Confessions on a Dance Floor*:

The album is available in regular and deluxe versions, but each version comes in two flavors. There's a standard album with individual songs, and a Non-Stop Mix album with songs joined together—no annoying gaps between songs. This excites me in a big way.

No, I haven't suddenly become a fan of Madonna's work. This excites me because it hints at good things to come.

Talk to classical or jazz enthusiasts (or anyone keen on concept albums), and you'll hear that the gap of silence between album tracks purchased at the iTunes Music Store (and other digital music outlets) drives them to distraction. Until now, it has been impossible to purchase music from the iTunes Music Store that doesn't contain these hiccups.

Madonna has the clout to insist that a gapless version of her album be sold. I pray that this version sells well enough that Apple sees the benefit in offering nonstop versions of other music it sells—symphonies, jazz suites, even *Abbey Road*. Should Apple do so, however, there's one big change that needs to be made: chapter marks. That's where Madonna's mega-album misses the mark. As with chapters in a Podcast, I should be able to press buttons to navigate through the tracks. This gives me the best of both worlds—the chance to hear a musical work from beginning to end without interruption and the opportunity to navigate through the work and pick out individual songs or movements. The iPod will also need the ability to display the name of those bookmarks when I move to them, so I can have some notion of where I am.

As wonderful as Madonna may be, she's no Mozart, Mahler, or Miles. These artists deserve at least the amount of respect that the iTunes Music Store has afforded to the Material Girl. And so do those of us who choose to buy our music from Apple.—CHRISTOPHER BREEN

CHECK IT OUT: WIDGET

Ever wonder how many songs you've listened to in iTunes? Or how many hours you've spent listening to music? iTunes Stats (macworld.com/1002) gives you all that and more: total number of songs, total play count, average plays per track, and even the number of tracks you've never listened to. Clicking on an applicable number shows its percentage. Sure, some of this information could be culled using various smart playlists and a spreadsheet, but it's neat to have it all right there at a glance. And iTunes Stats updates whenever Dashboard is displayed.—DAN FRAKES

Number of Songs:	20156
Play Count:	803
Average Plays per Song:	0.04
Unheard Songs:	19591
Unrated Songs:	20155
Unchecked Songs:	757
No Artwork:	16096
Duplicate Artwork:	39
No Artist Info:	28
No Album Info:	187
Playlists:	16
Hours Spent Listening:	59



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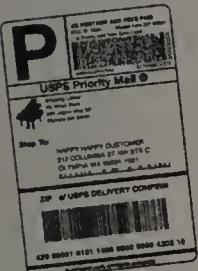


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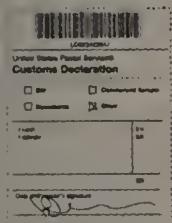
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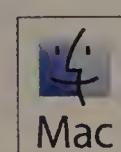


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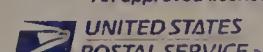
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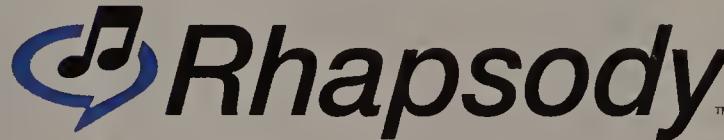
REALNETWORKS EXPANDS SUBSCRIPTION MUSIC SERVICE

Rhapsody Comes to the Mac

Mac users who want access to legal, mainstream digital music have been limited to the iTunes Music Store and its song- or album-purchase model. That changed when RealNetworks opened its subscription-based Rhapsody streaming music service to Mac and Linux users at the beginning of December 2005. The company has expanded its service by launching a beta version of the Rhapsody Web site (www.rhapsody.com), which is meant to offer users the core functionality of the Rhapsody service.

"This will expose the Rhapsody experience to users right on their Web browser," says Karim Meghji, RealNetworks' vice president of music services. "What this will do is give users on the Mac, Windows, and certain distributions of Linux the essence of the Rhapsody experience."

Anyone who registers can play up to 25 songs per month and access 25 different Internet radio stations for free. Rhapsody Unlimited, which lets you listen to as many of the service's more than 1.25 million songs as you want through the



site, costs \$10 a month—the same price as purchasing a typical album from the iTunes Music Store.

The Web site does not allow Mac and Linux users to purchase and download music—a feature of the Windows version—because such functionality relies on the Windows Rhapsody client. RealNetworks would not say when, or even if, a similar Mac client may be available.

"We are not talking about dates when we would deliver the full client," says

Meghji. "As we take this step to deliver Rhapsody to more platforms, we will listen to what customers have to say and have that partially guide us to where we will go."

RealNetworks currently has 1.3 million subscribers to its Rhapsody music service, which Meghji attributes to "reliability, quality of editorial, and programming." He adds that "our goal is not to be the low-price leader—our goal is to provide a good experience."

While the Rhapsody Web-site launch is only the first step in the company's strategy, Real is upbeat about how the launch will be accepted by Mac and Linux users.

"We believe the Mac and Linux communities will appreciate this step of being able to access Rhapsody," says Meghji. "We are not going to stop there." —JIM DALRYMPLE

THE CONQUEST

DiskWarrior is Now OSX Native

It's the indispensable utility that repairs problems such as disks that won't mount, files you can't trash, and folders that have disappeared. MacUser magazine said, "It's the fastest and safest data recovery utility you can buy."

Macworld magazine said, "DiskWarrior is by far the best disk utility available for the Mac; it can repair virtually any disk problem you may

encounter...and it is likely to become the only tool you'll want to keep with you at all times."

David Coursey, ZDNet AnchorDesk, agrees in an article comparing disk utilities. He used it to fix a disk that no other utility could. "DiskWarrior is a great product, not just because it fixed a pretty serious screw-up, but because it showed me what it planned to do in minute detail before doing it."

But disk damage isn't the only threat to your data. As hard drives get older, the drive mechanisms

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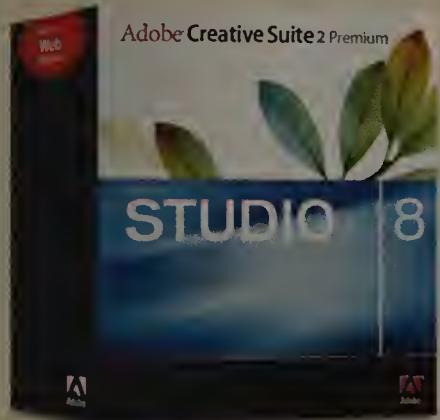
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NEWS IN BRIEF

Adobe Releases Macromedia Software Bundles

Showing the first signs of its merger with Macromedia, Adobe is releasing three new software bundles. The \$1,599 Adobe Design Bundle combines Adobe Creative Suite 2 Premium with Macromedia Flash Professional 8; the \$1,899 Adobe Web Bundle includes the same version of Creative Suite along with Macromedia Studio 8; and the soon-to-be-



released Adobe Video Bundle will include Adobe video software and Flash Professional 8.



NBC Shows Added to iTunes

Apple announced the addition of 11 TV series from NBC Universal to the iTunes Music Store. Episodes from *Law & Order*, *The Office*, *Surface*, *The Tonight Show with Jay Leno*, *Late Night with Conan O'Brien*, *Monk*, and Sci Fi Channel's production of *Battlestar Galactica*, as well as from

classic shows *Alfred Hitchcock Presents*, *Dragnet*, *Adam 12*, and *Knight Rider*, are available for \$1.99 each.

Apple Launches iPod 101 Web Site

In another acknowledgement of the importance of the iPod, Apple has created a new online guide and support site aimed at iPod owners (macworld.com/1011). It covers topics such as iPod basics, using iTunes, purchasing tracks from the iTunes Music Store, and how to troubleshoot a problematic 'Pod.—MACWORLD STAFF



PHOTOGRAPH COURTESY OF APPLE

CONTINUES

DISKWARRIOR

begin to malfunction. Eventually, the malfunctions become so severe that the drive simply stops working. DiskWarrior can automatically test for hardware malfunctions, giving you the chance to back up your data before it's too late.

Be prepared. Don't wait until after you have a disk disaster to buy your copy of DiskWarrior. Bob LeVitus, aka Dr. Mac, said, "I feel naked without DiskWarrior." You can believe MacHome magazine when they said, "DiskWarrior is a quick, one-click solution to faster, more stable hard drives."



CONQUER DISK DAMAGE



WHY INSTANT MESSAGING ISN'T FOR EVERYONE

i(Don't)Chat

I like iChat—it's cute. You can have your own customized icons, and you can keep it on just in case people want to talk to you from the privacy of their keyboards. It took me a few months—OK, a year and a half—to set up my iChat. I registered with AOL for a screen name, and I crafted my own icon (a picture of my cat Lila). There's only one problem: I never use it.

A few years ago, I was writing a story about chat software, and I made my husband (who has a Windows machine at work) download all the programs, too, so I could try them out. Chatting came in very handy. If I wanted to tell him something, I'd just write, "Busy?" And, bless his soul, he'd write back, "Never too busy for you." Then we'd talk with much more privacy than a phone in a cubicle allows. I liked that. But he soon tired of it. "I was going to ask you whether you didn't have work to do," he wrote one day. "Then I remembered, this is your work." Soon after that,



he started to be "away" all day, so I couldn't chat with him even if I wanted to. Our chatting days ended unceremoniously—luckily, my story was also finished.

Fast-forward to today: I fired up iChat, and almost everyone in the office is connected via Bonjour, so I really feel like I'm part of the crowd now. And my husband also reluctantly agreed to get an AIM screen name so we could chat. But I'd rather walk over to talk to a coworker, and after the first couple of days, my husband was always mysteriously "away" again.

The thing I finally figured out is that chat imitates life. Either you're a chatter or you're not. I'm not a chatter in real life, and having a cute software program hasn't changed that (and as for the video aspect—forget it). So instead of chatting, my husband and I have gone back to communicating the "old-fashioned way": by e-mail.—JACKIE DOVE



CREATIVE BEAT

Castles & Kingdoms, from Dassault Systems (www.cosmicblobs.com): Expansion pack for Cosmic Blobs 3-D—graphics program for kids offers more than 50 medieval-themed character models, decals, and textures (\$5).

disclabel 3.0, from SmileOnMyMac (www.smileonmymac.com): CD-labeling software adds folders for organizing designs, a factory function for automatically generating label designs, and new text templates (\$30; upgrades, free for users who bought disclabel 2.X after September 1, 2005, and \$15 for users who bought before).

pdf-Office Professional 4.0, from Universe Software (www.pdf-office.com): PDF-creation software adds the ability to import PDFs created in other programs to be used as templates (contact Universe for pricing).

ShoeBox 1.5, from KavaSoft (www.kavasoft.com): Updated software for managing digital photo archives adds the ability to catalog all photos in a central location, even photos stored on CD or DVD (Express version, \$30; Pro version, \$80; upgrades, free).

BEAT ICON BY PAUL HOWAIT

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Power Mac G5 Quad

Four Cores Give High-End Mac a Mighty Speed Boost

BY HENRY NORR

After Steve Jobs announced Apple's plan to drop the PowerPC and put Intel inside future Macs, some performance-hungry pros feared they'd see no major advances in Mac processing speed until the arrival of an all-new, Intel-based line of high-end desktop models—something that could be a year or more away.

Cross that one off your worry list. With the introduction of the Power Mac G5 Quad, Apple has delivered the biggest jump in Mac performance in years—not for every application, but for the type this machine was designed for: computation-intensive, multiprocessor-savvy programs such as those commonly used in scientific computing, professional audio and video, and similarly demanding environments.

Gang of Four

The speed breakthrough is not the result of a sudden surge in G5 clock speed—two and a half years after the first G5s debuted at speeds of up to 2GHz, IBM, Apple's chip supplier, still hasn't hit the 3GHz mark. In fact, at 2.5GHz, the Quad's two G5s run a shade slower than the 2.7GHz chips that powered the previous top-of-the-line Mac.

The difference is that the Quad's processors are a new version of the PowerPC that puts two G5 processing units—known as *cores*—on each chip (macworld.com/1003). Each core has all the features of previous G5 chips, including a Velocity Engine to accelerate scientific and multimedia data processing, a 32K Level 1 cache for ultra-fast access to recently used data, and an equally speedy 64K Level 1 cache for

instructions. In addition, each core in the new G5 chips has a full megabyte of Level 2 cache memory, compared with 512K per chip in the previous G5 generation.

The other two new desktop models that were announced alongside the Quad, the 2GHz Power Mac G5 Dual and the 2.3GHz Power Mac G5 Dual (macworld.com/1004), use similar CPUs, but those systems have only one dual-core chip apiece. With *two* dual-core processors, the Quad has the equivalent of four standard G5 chips, twice as many as any previous Apple system. (One-time clone-maker DayStar Digital marketed a system with four PowerPC 604e chips for a few months in 1997.)

Just as Mac OS X divides chores between the two CPUs in older dual-processor Power Macs and between the two processing engines in the new single-chip, dual-core G5 systems, so it goes in the Quad, with all four engines sharing the load. But there's one technical tradeoff in the system's design: in previous Power Mac G5s, each CPU had its own frontside bus connecting the chip to memory; in the new models, the two cores in each chip have to share a bus. However, the new chips' expanded L2 caches help to compensate: with more information already on hand in the cache, the cores don't need to turn to the bus

as often. And when they do, a faster memory system should ensure that the bus gets loaded in a hurry: the Quad, like its single-processor, dual-core siblings, uses 533MHz DDR2 (double data rate 2), also known as PC2-4200, memory, compared with the 400MHz DDR chips in the previous models. (For more information on DDR2, see "Under-the-Hood Improvements," *Mac Beat*, January 2006.)

Net Effect

If you glance at the Macworld Lab benchmark results for the Quad, you might wonder what the fuss is all about. On the Speedmark test suite, the new system barely managed to edge out the previous Mac performance champ, the 2.7GHz dual-processor model. And considering that the Quad has twice as much raw processing power as its single-chip, dual-core siblings, its lead



REVIEWS YOU CAN TRUST Macworld rates only final shipping products, not prototypes. What we review is what you can actually buy.

over them is surprisingly modest (see the benchmark chart).

A closer look at the results, however, shows why the Quad really is a big deal—for the markets it was designed to serve. On many of the tasks that make up the Speedmark suite, the Quad only marginally outperformed the other models we tested; on six of the 15 tests, it even lagged slightly behind the 2.7GHz dual-processor system.

That's because many of the tasks timed in Speedmark, such as starting up the system, depend more on other components—particularly the hard drive—than on the available processing engines; other Speedmark tests use applications, such as Apple's own consumer-oriented iTunes and iMovie, which haven't been optimized for multiprocessor systems. Even our Adobe Photoshop CS2 test, a set of 14 scripted tasks using a 50MB image, showed a speedup of less than 10 percent relative to the 2.7GHz dual-processor Power Mac.

A few of Macworld Lab's tests, however, show the stunning improvements we'd hoped for from the Quad. In our standard rendering test with Maxon's Cinema 4D XL 9.1, the Quad needed only 37 seconds to handle a chore that took 63 seconds on the 2.7GHz dual-processor Mac, 71 seconds on the recently released 2.3GHz dual-core Power Mac, and 83 seconds on the new 2GHz dual-core model. In a separate test (not part of the Speedmark suite) that involves encoding video into MPEG-2 format with Apple's Compressor utility, the Quad got the job done in just 3 minutes and 23 seconds, whereas the 2.7GHz dual-processor system needed 5 minutes and 12 seconds, the 2.3GHz dual-core required 5 minutes and 35 seconds, and the 2GHz dual-core model, at 6 minutes and 20 seconds, took almost twice as long as the Quad. Those are huge time-savings.

The benefits of the Quad, even more than that of previous Macs, depend on the appli-

cations you run and even the tasks you perform most frequently. On some tasks in some programs, those benefits might not justify investment in a Quad. But for applications that have been fully optimized for multiprocessing, especially programs that make heavy use of the G5 Velocity Engine, and for users who try to run multiple computation-intensive programs simultaneously, the Quad may quickly pay for itself.

Processing Isn't Everything

Besides, the Quad's four G5 cores aren't its only attraction. As our Unreal Tournament 2004 frame-rate test suggests, the graphics card that's standard in the machine's 16-lane PCI Express slot—the Nvidia GeForce 6600 with 256MB of dedicated memory—delivers great action video. And the two other Nvidia graphics cards Apple offers as upgrade options for the Quad—the GeForce 7800 GT with 256MB of memory (\$350) and the two-slot Quadro FX 4500 with 512MB of memory (\$1,650), which supports two 30-inch Apple Cinema HD displays plus stereo 3-D goggles—undoubtedly perform even better, both with games and with scientific visualization applications.

In addition, the Quad, like the dual-core Power Mac G5s, offers all the advanced features that users expect (including FireWire 800 and 400 ports; a SuperDrive, now running at up to 16x and supporting double-layer burning; and digital/optical audio-in and -out jacks). Other major enhancements in the Quad are aimed at users who work on particularly demanding tasks and need the most advanced networking, storage, and expansion technologies available. It has room for up to 16GB of memory (with support for ECC [error-correcting code] RAM if it's needed), has three free PCI Express slots (one eight-lane, two four-lane), and has two Gigabit Ethernet ports, offering support for Apple's Xsan storage system and

for throughput-boosting features such as jumbo frames.

Sound of Speed

One note of caution: I found the Quad reasonably quiet in routine operation, but when you push it—in particular, by running tasks that keep all four G5 cores cranking—the fans kick in to assist the liquid cooling system, and you'll definitely hear and maybe even feel the resulting whoosh. The Quad operates within the same decibel range as previous Power Mac G5s, according to Apple, but when you get close to the high end of that range, the noise can be pretty intense.

Macworld's Buying Advice

The value of the 2.5GHz Power Mac G5 Quad depends on what you do with it. With many applications, it's merely the fastest Mac yet, but not by much, and the difference might not be enough to justify the expense. On the other hand, for users of many high-end media-processing and scientific applications, especially people who also want to use the latest expansion, networking, and storage technologies, the Quad adds up to a tremendous advance in Mac power, one that's well worth the price. □

RATING:

PROS: Two dual-core processors deliver substantial performance gains in many applications; speedy video card; huge memory capacity; PCI Express expansion slots; two Gigabit Ethernet jacks for advanced networking options.

CONS: Limited performance gains in many routine office and Photoshop tasks; cooling fans noisy when system is under heavy load.

PRICE: \$3,299

COMPANY: Apple Computer, www.apple.com

HENRY NORR is a former editor of MacWeek. He has been reviewing Mac systems since 1986.

	Speedmark 4	Adobe Photoshop CS2	Cinema 4D XL 9.1	Compressor 2.0	iMovie HD	iTunes 6.0.1	Unreal Tournament 2004
	OVERALL SCORE	SUITE	RENDER	MPEG-2 ENCODE	RENDER	MP3 ENCODE	FRAME RATE
Power Mac G5/2.5GHz quad-core	257	0:47	0:37	3:23	0:33	0:43	53.7
Power Mac G5/2GHz dual-core	215	1:04	1:23	6:20	0:36	0:58	40.6
Power Mac G5/2.3GHz dual-core	236	0:56	1:11	5:35	0:33	0:52	50.1
Power Mac G5/2.7GHz dual-processor	253	0:52	1:03	5:12	0:25	0:46	47.7
	>Better	<Better	<Better	<Better	<Better	<Better	>Better

BEST RESULTS IN **BOLD**. REFERENCE SYSTEMS IN *ITALICS*.

Speedmark 4 scores are relative to those of a 1.25GHz Mac mini, which is assigned a score of 100. Adobe Photoshop, Cinema 4D XL, iMovie, and iTunes scores are in minutes:seconds. All systems were running Mac OS X 10.4.3 and had 512MB of RAM, with processor performance set to Highest in the Energy Saver preference pane. We converted 45 minutes of AAC audio files to MP3 using iTunes' High Quality setting. We used Unreal Tournament 2004's Antalus Botmatch average-frames-per-second score; we tested at a resolution of 1,024 by 768 pixels at the Maximum setting. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 70 percent and History was set to Minimum. To compare Speedmark 4 scores for various Mac systems, visit our Apple Hardware Guide at macworld.com/C815. For more information about Speedmark 4, visit macworld.com/speedmark. —MACWORLD LAB TESTING BY JAMES GALBRAITH AND JERRY JUNG

Photo Printers

How to Find Your Perfect Printer

BY JAMES GALBRAITH

As electronic photo libraries begin to overflow with digital snapshots, more and more people are trying their hand at printing photos at home. If you're one of them, you'll be happy to know that modern photo printers make the process easier than ever. In some cases, you may not even need to turn on your computer for the job.

With high resolutions, fast print speeds, and improved inks that resist fading, today's printers make for great home photo labs. But to find the right one, you'll need to spend some time thinking about what type of prints you want and which features are most important to you.

We've provided some general advice that will help you choose one of the many photo printers on the market. We've also rated printers in two categories—letter-size photo printers with media-card slots, and portable 4-by-6 photo printers. (For reviews of other types of printers, go to macworld.com/0908.)

Types of Printers

Are you looking for a quick way to print 4-by-6-inch photos to send to relatives? Or do you need something that can also print out Web pages and e-mail messages? Most photo printers fit into one of a few categories—each specializing in a different type and range of output.

Letter-Size Photo Printers If getting great-looking photos as large as 8 by 10 inches is your goal, look for a dedicated photo printer. Most feature additional ink colors, which help improve image quality, and photo-specific features such as media-card readers and ports



Canon Pixma
iP6600D

for plugging in your camera, so you can skip using your Mac altogether and print directly from your camera.

Photo printers come in many configurations, but letter-size photo printers are the most versatile option. They can produce 8-by-10-inch photos and stacks of 4-by-6-inch photos, as well as the occasional Web page and e-mail message. Some Epson photo printers will even print directly onto the surface of a CD or a DVD. Prices range from \$100 to \$400, depending on the options included. And while they're primarily for photo printing, some can also print nice-looking text and graphics.

4-by-6 Photo Printers Wouldn't it be great if you could hand out 4-by-6-inch snapshots taken at the family reunion while you were still at the family reunion? With a portable photo printer, you can. As the name implies, these compact printers produce only borderless prints that are 4 by 6 inches—by far the most popular size in the world of digital imag-

ing. (Hewlett-Packard's Photosmart 385 GoGo printer will also print 4-by-12-inch panoramas.) They tend to be much smaller than traditional photo printers, so they're easier to carry around to special events. Most of them have optional batteries so you don't need to be near a power outlet to print. Epson's PictureMate printers even come with a handle. If you don't want to spend a lot of time editing photos and just want to get prints fast, a compact printer is a great choice. Prices typically range from \$150 to \$300 depending on the model and whether you spring for additional options such as a battery pack.

Getting Connected

Once you've decided which type of printer is right for you, you can start focusing on features. One of the first things to consider is whether the printer will work with your setup at home. While almost all printers will

continues



Epson Stylus Photo R340

Our Picks



We rounded up the current offerings in two photo-printer categories: letter-size photo printers (which print photos as large as 8 by 10 inches) that include media-card slots for printing directly from your digital camera, and portable 4-by-6 photo printers, which let you print smaller snapshots on-the-go.

In the letter-size category, our two Top Products are Canon's Pixma iP6600D and Epson's Stylus Photo R340. No matter what you're printing, the Canon will do a good job. But if you're most interested in printing excellent color photos, the Epson printer is the way to go.

In the 4-by-6 category, our clear favorite is the Epson PictureMate Deluxe Viewer Edition. It's very flexible, with its optional rechargeable battery and LCD, and it prints very good photos quickly.



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connect to your Mac via USB, many also offer additional options.

Joining a Network If you'd like to be able to access your printer from any computer in the house, you'll need to attach it to a network. You can share any USB printer that's connected to your Mac, simply by turning

on Printer Sharing in OS X's Sharing preference pane. However, you'll have to keep your computer on and awake at all times for networked users to access it. Some ink-jets come network-ready either by including built-in Ethernet ports or by offering optional print servers. While these options

can be expensive, they're also more convenient if you're sharing between several different computers. You won't have to keep your computer on or store queued jobs on your hard drive, and you can place the printer wherever you'd like.

continues

LETTER-SIZE PHOTO PRINTERS WITH CARD SLOTS COMPARED

Company	Canon	Epson	Epson	Hewlett-Packard	Hewlett-Packard
Product	Pixma iP6600D TOP Product	Stylus Photo R320	Stylus Photo R340 TOP Product	Photosmart 8050	Photosmart 8250
Rating	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
Price	\$200	\$180	\$200	\$150	\$200
Contact	www.canon.com	www.epson.com	www.epson.com	www.hp.com	www.hp.com
More information	macworld.com/0950	macworld.com/0318	macworld.com/0948	macworld.com/0949	macworld.com/0773
Number of colors	6	6	6	6	6
Number of cartridges	6	6	6	2	6
Cost to replace all cartridges	\$86	\$79	\$79	\$60	\$68
Supported media cards	CompactFlash Type I and II; IBM Microdrive; SmartMedia; Sony Memory Stick, Memory Stick Pro, and Memory Stick Pro Duo; Secure Digital; miniSD Card; MultiMedia Card; xD-Picture Card. ^a	CompactFlash Type I and II; Secure Digital; MultiMedia Card; IBM Microdrive; xD-Picture Card; SmartMedia; Sony Memory Stick, Memory Stick Pro, Memory Stick Duo, and MagicGate Memory Stick; SmartMedia; Secure Digital. ^a	CompactFlash Type I and II; MultiMedia Card; IBM Microdrive; xD-Picture Card; Sony Memory Stick, Memory Stick Pro, Memory Stick Duo, and MagicGate Memory Stick; SmartMedia; Secure Digital. ^a	CompactFlash Type I and II; Sony Memory Stick; Secure Digital; MultiMedia Card; SmartMedia; USB flash drive; xD-Picture Card. ^a	CompactFlash Type I and II; IBM Microdrive; Sony Memory Stick Duo, Memory Stick Pro, and MagicGate Memory Stick; miniSD; Secure Digital; MultiMedia Card; xD-Picture Card. ^a
Pros	Huge, 3.5-inch color preview LCD; two paper trays; automatic double-sided printing built in; economical individual ink cartridges; prints great-looking photos.	Economical individual ink cartridges; can print on CDs and DVDs; excellent photo quality.	Excellent color-photo print quality; easy to print directly onto printable CDs and DVDs; large, 2.4-inch color preview LCD; economical individual ink cartridges.	Inexpensive; prints great black-and-white photos when using optional ink cartridges; prints very good-looking text on plain paper; built-in 4-by-6-inch paper cassette with storage compartment.	Large, 2.5-inch LCD; very good print quality on HP Premium Plus paper; economical individual ink cartridges.
Cons	Plain-paper text printing was a little fuzzy.	Small color preview LCD; sluggish text printing; plain-paper text printing was a little fuzzy.	Black-and-white photos had a slight color cast; plain-paper text printing was a little fuzzy.	Small color preview LCD; visible dot patterns on prints in computerless mode.	Prints on HP's new Advanced Photo paper were unimpressive; visible dot patterns on images except at highest-quality settings.
Comments	The Canon Pixma iP6600D's plain-paper text could be cleaner, but it sets itself apart from the pack by offering a large color LCD and built-in automatic duplexing.	The Epson Stylus Photo R320 is a great photo printer with some nice extra features. It's a good all-around printer, too, though its text prints were a little less sharp and took more time to print than those of other recently reviewed photo ink-jet printers.	If you want to print pictures at home, Epson's Stylus Photo R340 prints the best color photos in its class. Its ability to print to CDs and DVDs extends its usefulness. The Epson's only weakness as a photo printer is its black-and-white prints.	Though it has the smallest preview LCD of the printers in this group, and lacks some of the bells and whistles of its more expensive competitors, the HP Photosmart 8050 does a very good job of printing color photos. And with the help of its optional photo gray print cartridge, it also prints great black-and-white photos.	When we used HP's Premium Plus Photo paper and higher-quality print settings, we were able to get impressive prints. However, the Photosmart 8250's fast print-speed and print-durability claims were overshadowed by the lower quality of the printed output on HP's new Advanced Photo paper.



IMAGE QUALITY

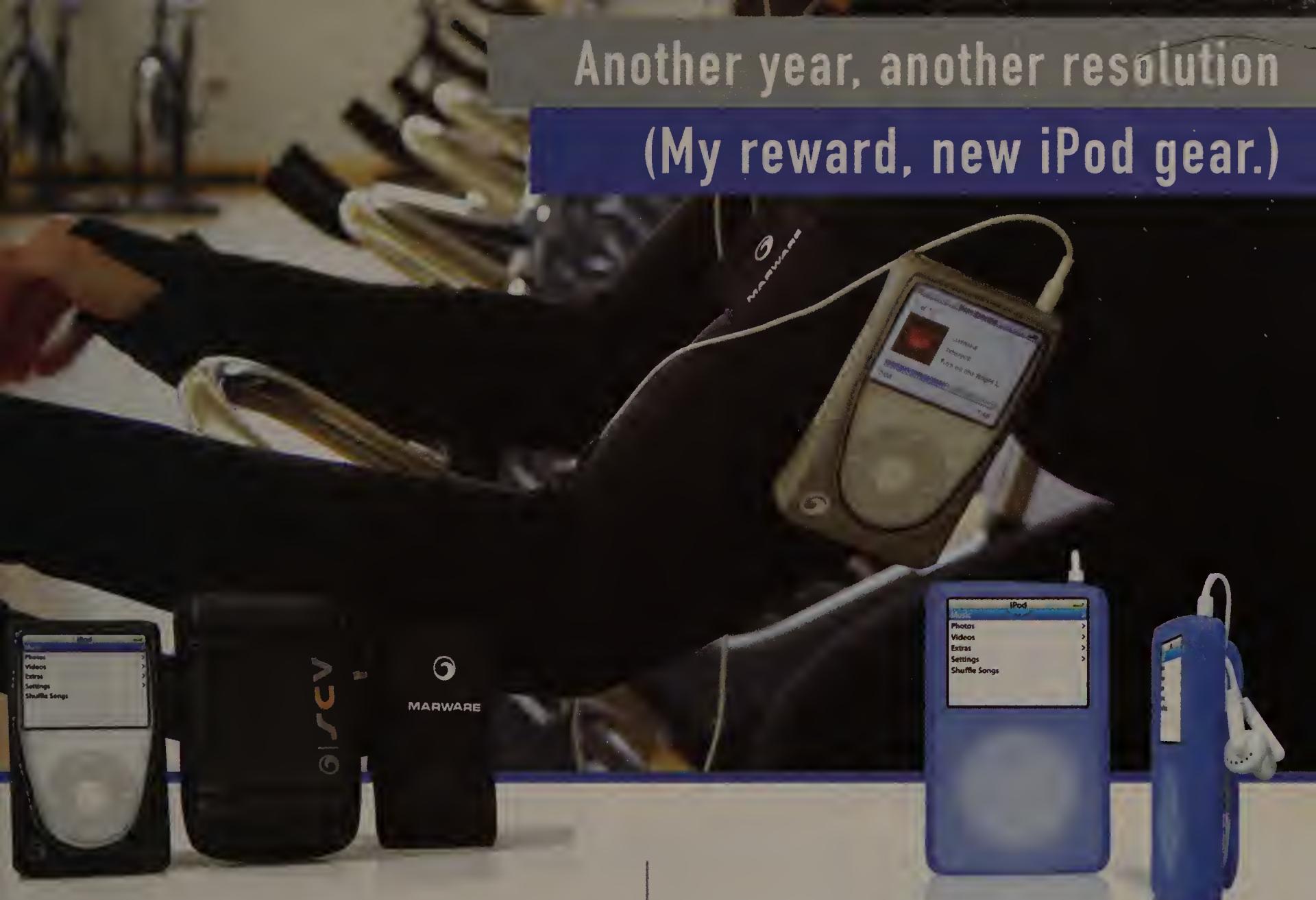
Text	Good	Good	Good	Very Good	Very Good
Photo	Very Good	Excellent	Excellent	Very Good	Very Good
Graphics	Very Good	Good	Very Good	Good	Very Good
SPEED					
10-page Word document speed	3:24	5:11	5:06	3:12	1:53
8-by-10-inch photo print speed	5:16	7:45	7:48	6:44	4:26

BEST RESULTS IN **BOLD**. ^aIf your camera uses another type of media card, check your media-card maker's Web site for available adapters. Also be sure to check the printer maker's site for compatibility.

All speeds are in minutes:seconds. We tested each printer via a USB 2.0 connection to a dual-processor 1GHz G4 running Mac OS X 10.3.9. We recorded the amount of time it took each printer to print a ten-page Microsoft Word document in Normal or Good mode and an 8-by-10-inch photo print of a 22MB file from Adobe Photoshop CS2 in Best mode. We looked at many types of documents and rated the quality of each printer's text, photo, and graphics prints as Excellent, Very Good, Good, Flawed, or Unacceptable.—MACWORLD LAB TESTING BY JAMES GALBRAITH AND JERRY JUNG

Another year, another resolution

(My reward, new iPod gear.)



Sportsuit Convertible for 5G iPod

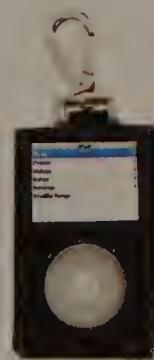
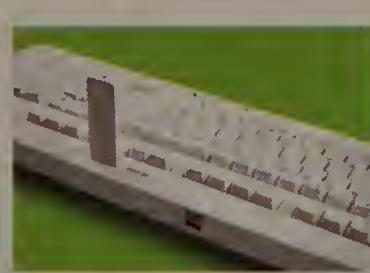
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Sport Grip Backwinder for iPod video

This colorful translucent silicone case features a built-in headphone cord winder and completely covers the Click Wheel for maximum protection.

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iTrip for Dock iPods

The most popular FM transmitter is now compatible with all full sized dock connector iPods, including the iPod video.

iSnug for nano

Features a poly-carbonate outer shell, storage pockets, high density protective foam, and built-in compartments.

Boostaroo Revolution

Awesome portable audio amplifier & splitter gives you high-definition 3D surround sound imaging for two higher-quality headphones.

USB 2.0 Keyboard

Charge and sync your iPod. Features Hi-Speed USB 2.0 Dock, Option keycaps, 2-port USB hub on the back, and Quiet Dome Switches.

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You can also connect your printer to a wireless network. If you own an AirPort Extreme Base Station or an AirPort Express, you can plug your printer into the base station's USB port and share it across your wireless network. But you'll also run into a few limitations. For example, you can't run utilities, such as ones that clean and align the print head, without being connected directly via USB. And some printing features may not be available. For a more flexible wireless connection, a few printers, such as the HP Photosmart 8450 (**4½**; macworld.com/0280), provide built-in support for wireless networks. Others offer an optional wireless print server that plugs into the USB port of the printer.

Forget the Computer If you don't enjoy spending time in an image-editing program, and you just want fast access to your photos, you can choose to cut your Mac out of the printing loop entirely. Many photo printers have additional ports that let you print directly from your digital camera or a media card. If you want to print from your camera,

look for a USB port on the front of a printer that supports PictBridge. This technology allows you to use the camera's buttons and menus to select a photo, specify the number and size of prints you want, and then print.

More-advanced printers also offer memory-card slots (see comparison tables for information on which media cards the reviewed printers support). You simply remove the card from your camera and stick it into the appropriate slot.

(If your camera uses a card other than those that the printer indicates it supports, there may be an adapter available. Check your media-card maker's and the printer manufacturer's Web sites to find out.) The printer



Leave Your Mac Out of It Many photo printers have slots for popular camera media-card formats, so you can print straight from the card.

gives you options for accessing the photos and selecting prints. Printing from a media card helps you preserve your camera's battery, since you don't have to keep the camera on

continues

PORABLE 4-BY-6 PHOTO PRINTERS COMPARED

Company	Canon	Epson	Hewlett-Packard
Product	Selphy DS810	PictureMate Deluxe Viewer Edition TOP Product	Photosmart 385 GoGo
Rating	3½	4½	3½
Price	\$150	\$199	\$200
Contact	www.canon.com	www.epson.com	www.hp.com
More information	macworld.com/0951	macworld.com/0653	macworld.com/0776
Number of colors	3	6	3
Number of cartridges	1	1	1
Price per cartridge	\$12	\$65	7ml, \$25; 14ml, \$35
Cost per print	as low as 29 cents	as low as 24 cents	as low as 24 cents
Size of prints	4 by 6 inches and smaller	4 by 6 inches and smaller	4 by 12 inches and smaller
Supported media cards	CompactFlash Type I and II; IBM Microdrive; SmartMedia; Sony Memory Stick, Memory Stick Pro, and Memory Stick Duo; Secure Digital; MultiMedia Card; xD-Picture Card. [^]	CompactFlash Type I and II; Secure Digital; Multi-Media Card; Sony Memory Stick Pro, Memory Stick Duo, and MagicGate Memory Stick; SmartMedia; IBM Microdrive; xD-Picture Card. [^]	CompactFlash Type I and II; Sony Memory Stick Pro and MagicGate Memory Stick; Secure Digital; MultiMedia Card; SmartMedia; xD-Picture Card. [^]
Pros	Inexpensive.	Very good prints; thumbnail previews on great-looking LCD; battery option (\$70); handle.	Very good prints; compact design; can print panoramas; battery option (\$80).
Cons	No way to print black-and-white photos without using a computer; dull prints when printing from a camera card; images lose shadow detail when printed from Mac or PictBridge; no battery option.	Prints exhibit flat skin tones; highest-resolution printing not available in computerless mode.	Best cost per print available only when you buy a large quantity of media; photos are slow to dry.
Comments	The Canon Selphy DS810 had trouble overcoming its limited three-color ink palette. The colors in prints were undersaturated, and dark areas had a brown tint when we printed from a memory card. The prints looked much better when printed from the computer, but that's not how most people will want to use this product.	You can't ask for a better, more convenient portable ink-jet printer than the PictureMate Deluxe Viewer Edition. Its speed and image quality are great. But the new 2.4-inch LCD, which offers thumbnail previews, and the optional rechargeable battery make this little printer shine even more brightly.	Although it's smaller and lighter than Epson's PictureMate Deluxe Viewer Edition, the HP Photosmart 385 GoGo lacks the PictureMate's six quick-drying, water-resistant inks. But its colorful prints and the ability to print panoramas make the GoGo a real contender in the fast-growing portable photo-printer market.



Photo quality

Good

Very Good

Very Good

4-by-6 print speed

1:41

1:28

1:47

BEST RESULTS IN **BOLD**. [^]If your camera uses another type of media card, check your media-card maker's Web site for available adapters. Also be sure to check the printer maker's site for compatibility.

All speeds are in minutes:seconds. We tested each printer in both computerless mode and via a USB 2.0 connection to a dual-processor 1GHz Power Mac G4 running OS X 10.3.9. We recorded the amount of time it took each printer to print a borderless 4-by-6-inch copy of a 22MB photo file from a Secure Digital memory card at the highest available quality setting. We looked at many types of prints and rated the quality of each printer's photos as Excellent, Very Good, Good, Flawed, or Unacceptable.—MACWORLD LAB TESTING BY JAMES GALBRAITH AND JERRY JUNG

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Epson PictureMate
Deluxe Viewer
Edition



while printing. But some printers, such as the Epson PictureMate Deluxe Viewer Edition, force you to print at a lower resolution when you print from a memory card or a camera. Although Epson points out that the lower resolution allows for much faster printing, we'd prefer to have the choice between speed and quality.

If you think you'll use this feature often, look for a printer that also sports a color LCD screen. This will make tasks such as previewing and editing photos much easier.

Understanding Inks

One of the biggest expenses with printing at home is ink. In fact, over the life of your printer, you'll spend much more on ink than you did on the printer itself (see "The Money Drain"). So you should be clear on how your printer uses ink.

Counting Colors Nearly all consumer ink-jet printers used to use just four ink colors—cyan, magenta, yellow, and black (*C, M, Y, and K*, respectively).

While some photo printers still use just three or four colors, most use at least six—adding light magenta and light cyan to the mix.

These lighter colors help produce a more continuous tone and better highlights. High-end printers can use as many as eight inks—adding a gray (for improved gray-scale images) and an additional black (for nonphotographic printing).

Separate Cartridges or Combined? Some printers use individual ink cartridges for each color, while others combine multiple colors in a single cartridge. Separate ink cartridges may be the better choice—depending on the types of images you're printing,

you may end up using more of one color than another. If all the inks are contained in the same cartridge, you'll be throwing out unused ink just to replace the one color you need. Epson uses individual ink cartridges in most of its desktop ink-jet printers, whereas Lexmark uses multicolor cartridges. HP and Canon offer both types of cartridges.

However, the individual ink cartridges in a discontinued Epson Stylus Photo 2200, for example, tend to run dry at about the same time. So while having individual cartridges is a smarter bet, you may not need to base your buying decision on that issue.

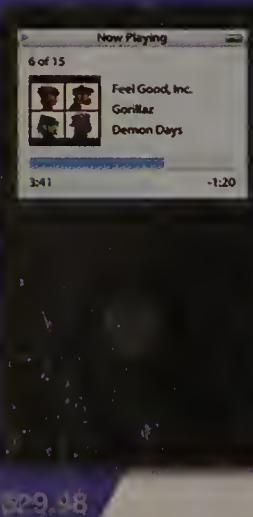


A Nice View A big LCD, like this 3.5-inch one on the Canon Pixma iP6600D, is great for previewing photos when printing without a computer.

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The Money Drain

When shopping for a photo printer, you might be tempted to start by comparing price tags. But be aware that the initial purchase price can be deceptive. The money you'll spend on ink cartridges and photo paper over the life of the printer far exceeds the cost of the printer. For example, the Pixma iP4200 (****; macworld.com/0837), an inexpensive ink-jet from Canon, costs \$130. However, you'll spend \$73 each time you replace all five of its ink cartridges. So by the time you replace the inks two times, you'll have paid more than the price of the printer.

Unfortunately, comparing the exact cost of inks between printers is next to impossible. Manufacturers rarely specify how much ink a printer uses per page. And when they do, those numbers still aren't terribly useful. Epson, for instance, says that the Stylus C66 uses about 14 cents' worth of ink per page, calculated with ink covering 5 percent of the page. You'll use much more ink than that when printing photos.

Also take the cost of photo paper into account. For example, Hewlett-Packard's Premium Photo high-gloss paper costs \$35 for a 50-sheet pack, or 70 cents per sheet.



Performance

One of the hardest things to gauge when you're at the store shopping for printers is performance. Does the model you're eyeing produce good photos? Will the photos print quickly? The problem is that the specifications that manufacturers use to describe these qualities are generally not helpful.

Most boxes list the printer's speed (measured in pages per minute), but these speeds usually apply to prints made in draft mode, a lower-quality setting optimized for speed. So the speed scores won't be a good measure of how long it'll take to get a top-quality print. If you do a lot of nonphoto printing (and are therefore more likely to print from draft mode), these numbers can be useful. But if

you'll mainly use your printer for photos, know that the listed print speed will probably not be representative of what you'll get. For real-world print speeds, check out Macworld Lab test results at macworld.com/0908.

It's also not usually worth dwelling on the listed resolution, the measurement of how many dots per inch a printer lays down. All photo printers on the market now offer sufficient resolution for high-quality prints. Print quality is determined by where on the page a printer puts the ink. That's not something you can learn by looking at the box.

The Bottom Line

A good photo printer is incredibly useful if you take lots of photos and want to share them easily, whether or not you want to be intimately involved with the image-editing process. Finding just the right balance of features, speed, and quality is a balancing act indeed. □

JAMES GALBRAITH is Macworld's lab director.

More Photo Advice

Parts of this article were adapted from the *Macworld Digital Photography Superguide* e-book, which features nearly 100 pages of expert digital photography advice. For more information on buying the e-book, go to macworld.com/0976.



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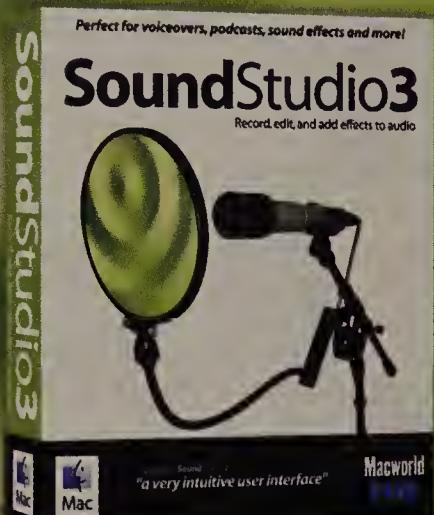
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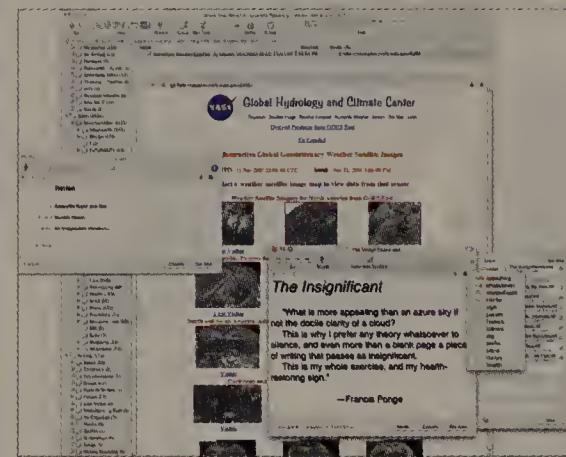
praise for SoundStudio 2

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Devonthink Professional 1.0 ▲ (\$75; Personal Edition, \$40), from Devontechnologies (www.devon-technologies.com): Most information managers allow you to collect documents, notes, clippings, and multimedia files in a searchable database. But multi-talented Devonthink Professional 1.0.2 offers more, including an integrated Web browser and news reader, and powerful artificial intelligence features that give you greater insight into your data (macworld.com/0991).

Easy Presenter ▶ (\$40), from Keyspan (www.keyspan.com): Keyspan's Easy Presenter



lets you roam freely and switch slides while you're giving presentations with your Mac. Despite the unfortunate placement of its laser pointer button, this device is a good solution for people who want to avoid handling a computer when they're speaking (macworld.com/0993).



EvolutionTV ▲ (\$279), from Miglia (www.miglia.com): EvolutionTV, another hardware-software combo in the DV-recorder market, has great video quality and an infrared remote control. However, the accompanying software leaves much to be desired (macworld.com/0990).

Fluid Mask 1.0 (\$249), from Vertus (www.vertustech.com): Masking is one of the most arduous parts of a Photoshop imaging project, as isolating a subject from its background can be tedious. If masking and compositing are big parts of your life, the Fluid Mask plug-in deserves a look. It's powerful, but some of its advanced tools can be daunting (macworld.com/0989).

Now Up-to-Date & Contact 5.0 (\$130; download, \$120; upgrade, \$50), from Now Software (www.nowsoftware.com): This package may be overkill

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iPod Accessories

iSongBook ▼ (\$330), Tivoli Audio (www.tivoliaudio.com): This portable radio and iPod speaker system combines a digital alarm clock, an iPod Universal Dock base, and stereo speakers in a weather-resistant enclosure. It has excellent sound quality, loud maximum volume, and very good battery life (macworld.com/1030).



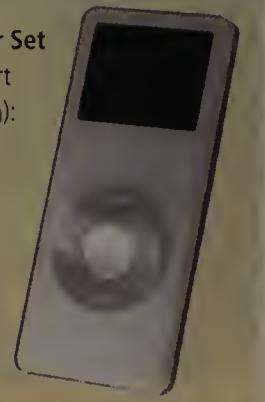
inMotion iM5 ▼ (\$150), from Altec Lansing (www.alteclansing.com): The inMotion iM5 is the least expensive of Altec Lansing's portable iPod speaker systems. It has a compact, sturdy design; good battery life; and decent sound for its size (macworld.com/0999).



iAirPlay ▶ (\$30), from Monster (www.monsterable.com): The iAirPlay, a power adapter for dockable iPods, gives you a plug that connects to the special power plugs provided on many newer airplanes, and an accessory jack (cigarette lighter) adapter that fits over the airline plug, for use in a car. Given its small size and light weight, it's a no-brainer accessory for frequent travelers (macworld.com/0997).



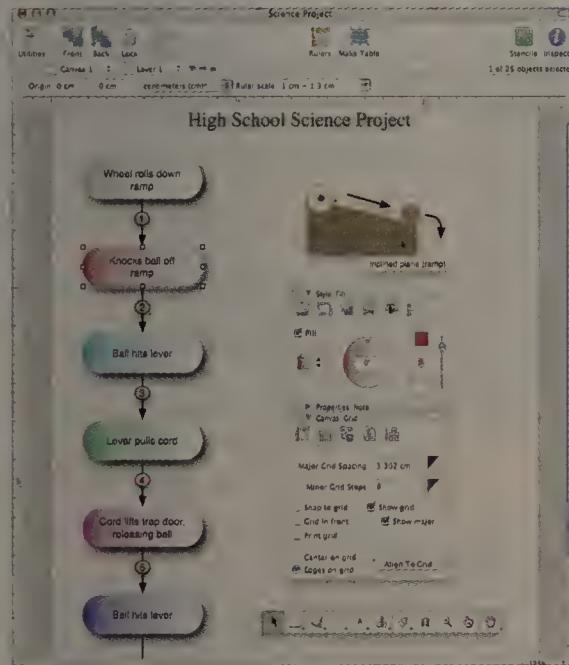
Crystal Film Cover Set ▼ (\$15), from Power Support (www.powersupportusa.com): This is the ultimate scratch protector for the iPod nano. Thin and transparent, the Crystal Film Cover Set is nearly invisible when it's applied to your tiny music player (macworld.com/1000).



The switch is ON

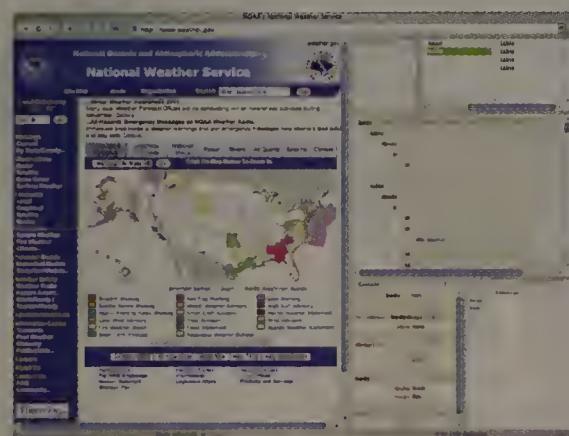
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for people whose needs don't extend beyond basic contact management and calendaring. But for cross-platform businesses, or for users who need centralized calendar, contact, and resource management, Now Up-to-Date & Contact 5.0 is an excellent choice (macworld.com/0995).



OmniGraffle Professional 4.0 (\$150), from The Omni Group (www.omnigroup.com): While OmniGraffle Professional 4.0 is probably too high-end for producing simple diagrams, this fantastic program is a revelation for anyone who needs to explain processes and concepts visually (macworld.com/0992).

ScanSnap (\$495), from Fujitsu (www.fujitsu.com): This scanner is fast, scans as many as 50 pages using its document feeder, and sports automatic features such as sensing when a piece of paper is double-sided or in color. And it comes with a full version of Adobe Acrobat 7.0 Standard for manipulating the resulting PDFs (macworld.com/0956).



Xyle Scope 1.1 (\$15), from Cultured Code (www.culturedcode.com): Surfing the Web with Xyle Scope 1.1.5 exposes a Web page's underlying HTML and CSS source code. Highlight different parts of a page, and you can immediately see the corresponding code, to decipher how the page was built. It's a great way to learn CSS and an indispensable tool for Web experts who want to dig under the hood (macworld.com/0994).

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Sam Litt, Author of the Mac OS X Bible, Tiger Edition

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**Ted Padova, Author of Adobe Acrobat PDF Bible
Co-author of Adobe Creative Suite Bible**

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Andrew Shalat, InDesign Magazine, June/July 2005

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Keith Martin, MacUser 2005

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Allow Me To X-Plane

"If you're hunting for the ultimate flight sim or learning tool then look no further."
-PC GAMEWORLD.COM

"Realistic simulation is a cornerstone of the X-Plane design philosophy, so you can also plot out weather patterns and even download weather real-time from the Internet, simulate system failures to test out your piloting skills under adverse conditions and much more. X-Plane maps out the locations of 18,000 airports, and you can even take off and land from aircraft carriers at sea, if you wish."

-MACWORLD MAGAZINE

"The atmospheric effects in X-Plane are some of the best out there. The cloud layers and translucency are very believable and the fog and haze effects accurately depict real world visibility situations."

-SIMHQ.COM

"X-Plane 8 is a great product that anyone interested in flying will enjoy. It is very easy to get off the ground and fly and, once you begin exploring the possibilities offered by the program, you will not want to come back to earth. If you own a previous version, you will not feel that you wasted hard-earned cash on this one. If you never experienced X-Plane, you owe it to yourself to give this a go. Either way, it is well worth the price of admission."

9.5 of 10, "Hot Property Award" - LOADEDINC.COM

"Everything from the Cessna to the NASA space shuttle handles exactly how you would expect it to. This also gives the player a new challenge every time they open X-Plane as once you get used to the basics of one aircraft you can apply that to other planes. Also with the 29 aircraft available from the start and the hundreds downloadable from the massive cult following the series has built, every time you fly can be different and fresh."

95% rating - PC GAMEWORLD.COM

"X-Plane has always put versatility and extensibility before all else, making it no wonder that the simulator is used for FAA-certification training and test-flying aircraft that haven't even been built yet."

-INSIDE MAC GAMES

"With a virtually limitless area to explore, user created planes (downloadable too) and a wealth of modding programs (textures, landscapes etc) that add to the playing world, the scope is truly epic for this title."

-GAME CHRONICLES

"The 2D instruments in X-Plane 8 are very comprehensive and detailed compared to competing products, and the analog gauges deserve special mention, as they look and act very convincing when compared to their real-world counterparts. If you're interested in buying a simulator to train with that includes real-world instruments (so you can obtain an actual pilot's license), this is the product to get."

-GAMESPOT.COM

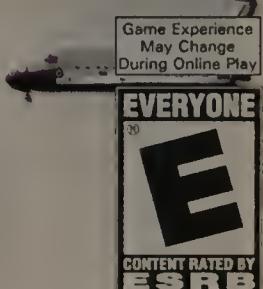


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Game Room

BY PETER COHEN

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News Feed



Civilization III and IV

 Aspyr Media (www.aspyr.com) has announced plans for Mac versions of Civilization III Complete and Civilization IV. The new Complete edition includes a multiplayer feature called Play the World, which wasn't included in the game's original Mac release.



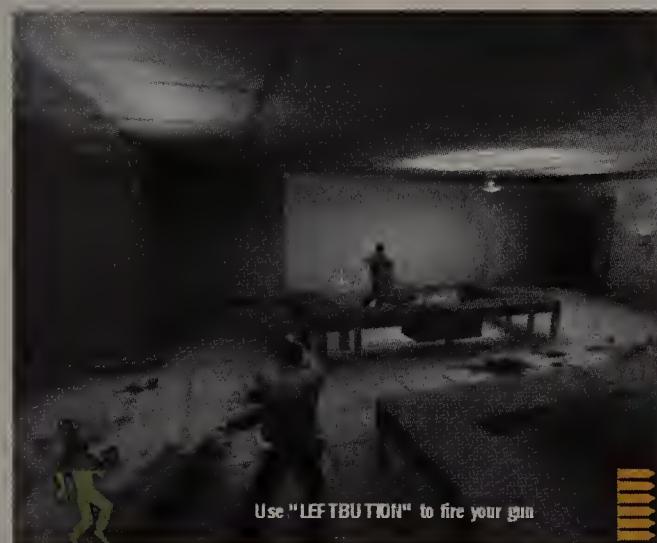
The Burning Crusade

Blizzard Entertainment (www.blizzard.com) has taken the wraps off its planned expansion pack for World of Warcraft, called The Burning Crusade. Fans of the massively multiplayer online role-playing game get new lands to explore, new missions to go on, new professions to master, new items to collect, and the ability to raise the experience of their characters to level 70—that's 10 levels higher than before.



The Friendly Skies

Runesoft Entertainment (www.rune-soft.com) is set to release Airline Tycoon Deluxe for the Mac. This economic strategy game puts you in charge of a commercial airline as you plan routes, hire and fire staff, design planes, and more.



My Zombie, Myself Forget saving the world. You'll feast on the living and stir up general mayhem in Stubbs the Zombie.

THIRD-PERSON ACTION

Stubbs the Zombie

First Look

Stubbs the Zombie takes place in the late 1950s, in a utopian city called Punchbowl. The city is filled with flying cars and robots, is impeccably clean, and is populated by well-groomed, peaceful inhabitants. Then Stubbs arrives. This former traveling salesman is looking for love and a quick bite to eat—and there's nothing he likes better than a little gray matter fresh from the container.

At its core, Stubbs is a traditional third-person brawler. You, as Stubbs, shamble around Punchbowl eating anyone within reach, and hitting and punching those who won't submit to your will. Eating your enemies' brains reanimates them as part of your loping zombie gang.

Stubbs has special defenses that can help get him out of a pickle. For example, he can pass highly noxious wind, which sends nearby civilians into paralytic fits, or temporarily tear off his forearm, which you can then remotely control as it scuttles up walls and through windows to possess humans.

The game looks and sounds fantastic. It features a phenomenal soundtrack made up of 1950s pop songs performed by modern indie bands: Death Cab for Cutie covers "Earth Angel," for example, and The Dandy Warhols take on "All I Have to Do Is Dream." (You can also purchase the soundtrack separately, through the iTunes Music Store.)

Due to the complex pixel shading and robust artificial intelligence, the game's system require-

BETA TESTED

PROS: Funny; awesome soundtrack; unique twist on the zombie genre.

CONS: The game is short; no multiplayer options.

PRICE: \$40

COMPANY: Aspyr Media, www.aspyr.com

ments are relatively steep. You'll need a 1.2GHz or faster processor and an ATI Radeon 9600 or an Nvidia GeForce FX5200 3-D graphics card with at least 64MB of VRAM.

Stubbs the Zombie is soaked in blood and gore. Fart jokes, crude language, and intense violence definitely help this game earn its Mature rating. But there's also a good dose of humor. Stubbs is at times ribald, absurd, and sarcastically funny.

I only wish the game were longer. You can easily finish the single-player game within a few hours. It does offer multiple levels of difficulty that help keep things interesting, but the story line doesn't change; the action just gets faster, and there are more bad guys to eat. The Xbox version offers a mode that lets two players revisit the single-player game; sadly, this feature is not in the Mac release.

The Bottom Line Obviously, Stubbs the Zombie isn't a game for kids—or for adults who have weak stomachs. But if you like your action with hefty amounts of blood, and if your humor is a little on the twisted side, this game is sure to please.

continues

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GAME ROOM

PUZZLE

Chainz 2: Relinked

RATING:

PROS: Strategy and Puzzle modes heighten challenge.

CONS: Classic and Arcade modes offer nothing new.

PRICE: \$20

COMPANY: MacPlay, www.macplay.com

In Chainz 2: Relinked, a new puzzle game by MacPlay, you have to match three or more links of the same color to make them disappear. Basic links can rotate either left and right or up and down to connect with other links. Special four-way links can connect in all directions at once. The more chains you link, the more points you earn. Some links have letters embedded in them—spell out C-H-A-I-N-Z, and you'll get additional bonus points.

Classic and Arcade modes feature more than 200 levels with plenty of power-ups to help you rack up big points. Arcade mode also makes you race against the clock.

Strategy and Puzzle modes, however, offer more interesting fare. In Strategy mode, the game adds three new links to the board with every turn. This means that you'll have to strategically eliminate chains to keep the board from filling up. In Puzzle mode, you have to work your way through 50 screens of carefully constructed puzzles—each more difficult than the last. You'll need to completely clear each puzzle to move on.

The game's system requirements are very modest: MacPlay recommends a 400MHz G3 or faster and Mac OS X 10.2.8 or later.

The Bottom Line In its Classic and Arcade forms, Chainz 2: Relinked is just another puzzle game. Where the game gets interesting is in the Strategy and Puzzle modes, which will work your brain and test your patience.



Hot Links Chainz 2: Relinked makes you match three or more links of the same color to clear the board and win the game.



Saving the Day Trouble is brewing in The Incredibles: Rise of the Underminer.

THIRD-PERSON ACTION

The Incredibles: Rise of the Underminer

RATING:

PROS: Cooperative multiplayer support; fun sequel; inexpensive.

CONS: Poor support for multiscreen setups and game pads.

PRICE: \$20

COMPANY: THQ, www.thq.com

Ever wonder what happened to the Incredibles after the end of the Disney-Pixar movie? THQ has endeavored to tell that tale with a new game called Rise of the Underminer.

The game starts where the movie leaves off, with Mr. Incredible and his friend Frozone heading off to battle the Underminer. The Underminer has hatched a sinister plan to pollute the earth and has built legions of robotic soldiers to do his bidding.

Like the original Incredibles game, Rise of the Underminer is a third-person brawler. In single-player mode, you'll take turns being Frozone and Mr. Incredible as they make their way through the Underminer's subterranean tunnels and battle robotic bad guys. As Mr. Incredible, you can use your strength to lift doors or slam apart weak floors, for example. As Frozone, you can freeze robots in place and skate through the air on ice slides. While there's a lot of action, it's all pretty tame. The game is rated for anyone over the age of ten.

The game also has a two-player cooperative mode, which lets you and a friend play side by side on the same computer.

Although the game's execution is good overall, I did run into a few shortcomings. It froze when installed on a system that was hooked up to multiple monitors.

continues

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GAME ROOM

Support for game pads is also weak. The game wouldn't recognize either of the pads I normally use. Admittedly, OS X's support for game pads isn't as broad as that of other platforms, but plenty of Mac game developers get the support to work.

The Bottom Line The Incredibles: Rise of the Underminer is an enjoyable continuation of the Incredibles story line. Too bad it has some technical shortcomings.

EDUCATIONAL GAME

Finding Nemo: Learning with Nemo

RATING: 3 1/2

PROS: Age-appropriate activities reinforce important educational ideas.

CONS: Repetitive action; bland graphics.

PRICE: \$20

COMPANY: Disney Interactive,
www.buenavistagames.com

Finding Nemo: Learning with Nemo is an educational game for kids who haven't yet learned to read and write but who can wield a mouse. A series of activities helps with pattern recognition, basic letter and number identification, and counting skills.

As kids play, they pick up periwinkle shells, which can be traded for stickers.



Fish Tales Kids learn basic skills as they follow Nemo in Finding Nemo: Learning with Nemo.

Periwinkle shells also serve as the reward for successfully completing an activity.

Pearl's Garden Eel Bingo, for example, asks youngsters to count and match eels. In Knock'em Down Nemo, players clear a path by listening to a letter of the alphabet and then knocking down a shell labeled with the corresponding letter. These activities help reinforce important concepts.

The imagery is fun and colorful, though it's not as sophisticated as the movie's graphics. Progressive levels of difficulty help keep kids engaged, though parents might find the repetition frustrating.

The Bottom Line Finding Nemo: Learning with Nemo offers enough activity to keep preschoolers and kindergartners busy for a while. □

Macworld.com Senior News Editor PETER COHEN often looks (and feels) like a zombie first thing in the morning.

Top Downloads | Fairies



In Fairies, a beautiful new puzzle game by Fun-Pause Games, you're a wizard looking to free fairies from an unknown evil. To break the magic spell that keeps them trapped inside jars, you'll need to match three or more fairies of the same color; any contiguous jars can make a match.

What makes Fairies special is its Playback mode. Playback is a memory game. You listen and watch as differently colored groups of fairies sound off musical notes. Then you have

to play them back in sequence. Levels get progressively more difficult. It's similar to the old electronic game Simon—and it's a lot of fun.

Overall, the game runs well. However, I did run into some problems while playing in Windowed mode. If I left the program to work in another application, the game stopped responding, forcing me to quit and restart. The game requires a 667MHz G4 or faster Mac.

The Bottom Line Fairies is a nice variation on the average puzzle game. It's definitely worth checking out—even if just for the musical Playback mode.

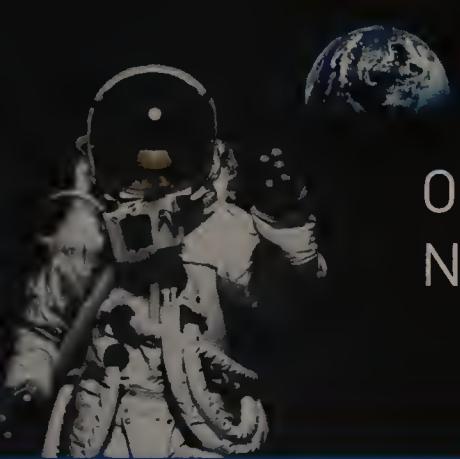
RATING: 3 1/2

PROS: Playback mode adds musical fun; beautiful production values.

CONS: Problems with Windowed mode.

PRICE: \$20

COMPANY: FunPause Games, www.fun-pause.com



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Mac Gems

BY DAN FRAKES

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QUICKTIME COMPONENT AND PLUG-IN

Flip4Mac WMV Player 1.0.2

QuickTime-compatible audio and video are coming into wider use on the Web, but Microsoft's dominance still manifests itself in the large amount of Windows Media content that Mac users come across. Microsoft does have a version of its Windows Media Player (WMP) software for the Mac; the package includes both the WMP application and a browser plug-in for viewing streaming media files within your Web browser. But from a Mac user's point of view, it would be charitable to call it good software. You can't scrub video in it; pausing and resuming playback often puts audio and video out of sync (or one of the two never actually resumes); and you can't even have two movies open at the same time. The browser plug-in isn't much better. Ever tried to scrub back a few seconds to view something you missed? With this plugin, you can't do that.

Ah, if only QuickTime understood Windows Media content, right? Thanks to Telestream's \$10 Flip4Mac WMV Player 1.0.2 (www.flip4mac.com), it can. With the WMV Player QuickTime component installed, you can open files that use Windows Media Video (WMV) versions 7, 8, and 9 (both standard definition and high definition), as well as Windows Media Audio (WMA) versions 7, 8, 9, Professional, and Lossless—all within QuickTime Player's familiar (and superior) interface. The included browser plug-in uses QuickTime to play back Windows Media content embedded in Web pages—adding the ability to scrub in-line media.



WMP-Free World Flip4Mac WMV Player lets you dump Windows Media Player and use QuickTime for most of your WMV and WMA playback needs.

WMV Player's preference pane gives you several options for customizing Windows Media playback, such as maintaining proper aspect ratios; having embedded Windows Media content open in QuickTime Player instead of in your browser; and importing local movie files completely before playback, to improve performance.

A few caveats do apply. For one, WMV Player cannot play DRM-protected Windows Media. And some people—especially those using Mozilla's Firefox—have found that WMV Player doesn't always work well for them. So I encourage you to take advantage of the free demo before purchasing WMV Player.

It would be nice if all Web sites decided tomorrow to switch to QuickTime format for their media. But since that's not likely to happen, Mac users might as well have the option of enjoying Windows Media files, and WMV Player brings us a few steps closer to that goal. Sure, WMP is free, whereas WMV Player is \$10, but sometimes you really do get what you pay for, and this is one of those times. Now if only Telestream would come out with RM Player for Real Media files.

ADVANCED CALCULATOR

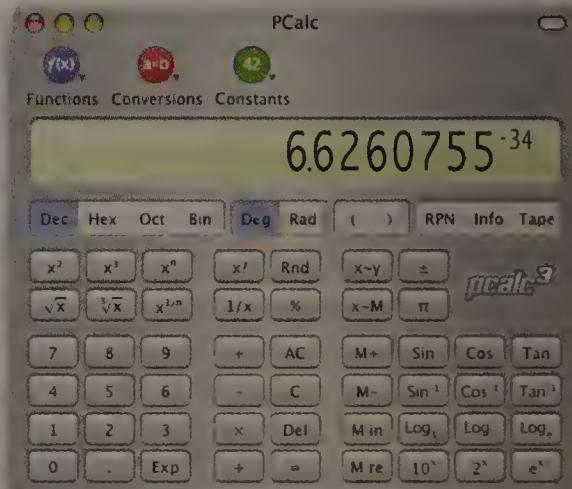
PCalc 3.0.2

I love scientific calculators—the kind with sizable screens, lots of buttons, and oodles of memory. My affinity for these gadgets stems partly from my science background. (I originally went to college to be a physicist. I changed my mind.) The other part is that I'm a big fan of RPN (Reverse Polish Notation), the preferred entry method for scientific and techie types, and RPN is a feature found mainly in very advanced calculators.

In recent years, software calculators have become increasingly popular, and my favorite is James Thomson's \$19 PCalc 3.0.2 (www.pcalc.com). If you need a scientific calculator, enjoy RPN, or are just a fan of geeky software, PCalc is the best of the lot. (PCalc also supports standard input, so it's not just for RPN lovers.)

Like OS X's own Calculator, PCalc has a basic mode that provides the most-common calculator functions. But enable its various advanced options, and you get all the features you'd expect in a full-fledged scientific calculator, along with a virtual paper tape; advanced information about the currently displayed figure; an RPN register display; and quick-access toolbar menus for functions, conversions, and constants.

PCalc's standard scientific functions are probably familiar to anyone who needs continues



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them, but its Functions, Conversions, and Constants features are useful additions. The Functions feature provides advanced calculations related to complex numbers, trigonometry, finance, and more. The Conversions feature works a lot like OS X's Calculator: it can convert units of angle, area, bytes, energy, length, pressure, speed, temperature, time, volume, and weight. (PCalc is missing Calculator's currency conversion feature, but that's available via Apple's Unit Converter widget if you need it.) And the Constants menu lets you quickly enter a number of useful constants, such as the speed of light, Avogadro's number, and standard gravitational acceleration.

PCalc also offers several minor but useful features that you rarely find in other calculators. For example, the Undo and Redo commands let you retrace (and correct) your steps, and you can copy or paste any number as ASCII, UTF-8, or UTF-16—PCalc does the conversion for you on-the-fly. And PCalc is likely the first calculator distributed as a Universal Binary—it's already able to run on upcoming Intel-based Macs.

If you'd rather use PCalc in Dashboard, the app includes a widget version. It doesn't provide the fancy drawers and toolbar and doesn't include the Functions, Conversions, and Constants features, but it's still the best widget calculator I've seen.

To avoid having PCalc's large window cover other windows and the desktop (or other widgets in Dashboard) when you're not using it, you can set PCalc to minimize to the display when it's in the background; this allows you to view the results of your calculation but hide everything else.

CONTEXTUAL MENU ITEM

Terminal Here Plugin 0.95

As someone who works with Terminal a lot, I often find myself wanting to do things that require it and the Finder to interact. For example, there are times when I want to open the current Terminal directory in the Finder. That's pretty easy to do—just type `open .` (the word `open` followed by a space and a period) and press return. Most of the time, though, what I want to do is work with the current *Finder* folder in *Terminal*. The answer to that challenge isn't quite so easy, and requires extra steps.

Luckily, there's a simple solution—in the form of Pychouse's free Terminal

continues

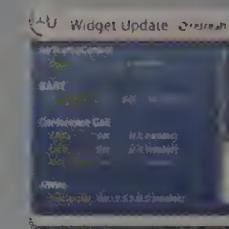
Hot Widgets

Although I review widgets on a regular basis in the Mac Gems Weblog, here's a look at some of my recent favorites (all are free unless otherwise noted).



EasyEnvelopes 1.0.1

Do you prefer to print addresses on your envelopes rather than scrawl all over them with a pen? If so, Ambrosia Software's Easy-Envelopes widget (★★★★½) is a must. Fire it up, and then enter an address manually or type the name of an Address Book contact (you can choose the home or work address if a contact has both). Click on the print button (cleverly disguised as a postage stamp with a printer on it) and insert a blank envelope into your printer, and you're ready to go. EasyEnvelopes even allows you to choose the envelope size and fonts, customize your return address, choose whether the return address prints on the front or back of the envelope, and enable U.S. Postal Service bar codes (www.ambrosiasw.com).



Widget Update 0.8

Making sure that all your widgets are up-to-date is a pain, so Georg C. Kaindl's Widget Update (★★★★½) does it for you—the mini app is a widget for your widgets. Tell it which software-update sites to check, and Widget Update will compare all your installed widgets with the latest versions as reported by those sites. Widget Update then lists any out-of-date widgets, along with their version details. Just click on the link for a widget, and your browser opens to its download page (macworld.com/0968).



SuperBrain Widget 1.6.1

Dashboard is a great environment for simple games, and if you're a fan of the 1970s game Mastermind, you'll love Power-4Mac's SuperBrain Widget (★★★★½).

The app randomly chooses four pegs (or as many as eight, if you prefer, to make it more challenging) of varying colors and secretly arranges them in a particular pattern. You get ten guesses as to the pattern; with each guess, the widget shows you how many pegs in your guess are the correct color but in the wrong location, and how many are both the correct color and in the correct location. If you can nail down the pattern in ten guesses or less, you win (www.power4mac.com).



Capture 0.7.9

To take full advantage of OS X's screenshot capabilities, check out VanillaSoap Design's Capture widget

(★★★★½). It lets you set the screenshot's file type (JPEG, TIFF, PNG, GIF, JPEG2000, PICT, BMP, QuickTime, PSD, or PDF), destination (desktop, folder, or Clipboard), scaling (from 10 percent to 100 percent), and image quality (from low to best). Full-screen, window, and selection buttons let you decide what to shoot, and Capture even allows you to easily take a screenshot of Dashboard (vanillasoap.com).



Conference Call

For sports fans, Day Late & Dollar Short Software's various Conference Call widgets (★★★★) for college football, NFL football, college basketball, NBA basketball, and NHL hockey offer the perfect way to keep track of their favorite teams. Each widget shows a team's entire season schedule: dates, times, and whether each game is at home or away. Games already played include the final score, with color coding (green lines for wins, red lines for losses); clicking on the score opens Fox Sports' game recap in your Web browser (www.daylateanddollarshort.com).



VelaClock 1.4

There are many clock widgets for Dashboard, but Vela Design Group's \$10 VelaClock (★★★★) tops the list. It

lets you choose as many as 24 cities around the world, displaying each one's local time and country flag. Select a city, and VelaClock's Time tab displays an analog clock with the local time, along with the date, time zone, and number of hours behind or ahead of you that location is. The Daylight tab displays that location's current day's daylight hours—broken up into bright daylight, night, and three levels of twilight—as well as the hours during which the moon is visible. Finally, the Moon Phases tab shows you what the moon currently looks like in your selected city, accurate to within a minute (www.veladg.com).

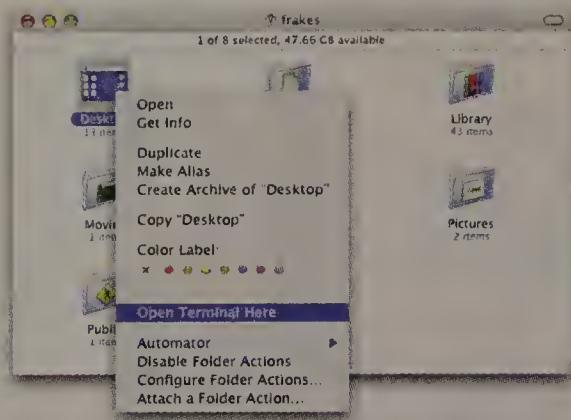


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Send to Unix Terminal Here Plugin lets you work with any Finder folder in Terminal using a contextual menu.

Here Plugin 0.95 (4.5; www.pyehouse.com/lynn). It adds an Open Terminal Here command to contextual menus that launches Terminal (or opens a new Terminal window if Terminal is already running) and changes the working directory to the selected folder.

The one problem is that since the menu command always opens a new Terminal window, you can't use Terminal Here Plugin to change the working directory for a Terminal window in which you're already working. (To do that, you can always use the old Terminal standby: type cd and follow it with a space, and

Web Color-Code Generator

ColorTagGen .01

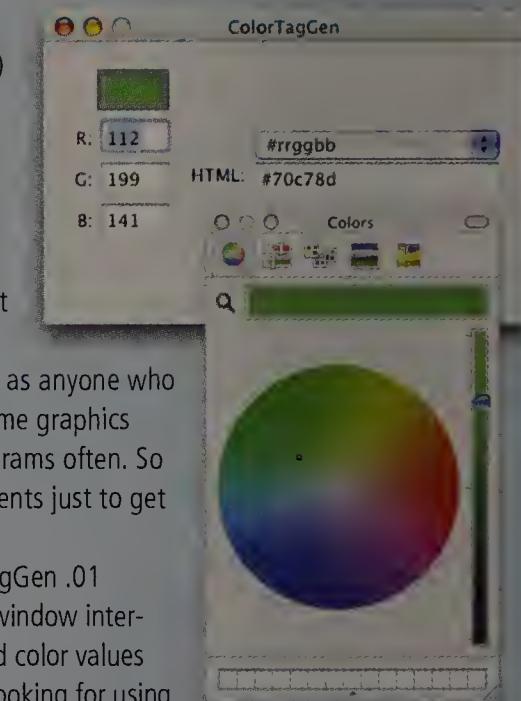
If you're a Web designer or just someone (like myself) who muddles around with Web sites on occasion, you're probably familiar with the hex-encoded colors you need to use in HTML and CSS. For example, #FF2F2A indicates that the text will be in red.

There are a number of ways to get the hex-encoded HTML values for a given color; most decent graphics programs—such as Adobe Photoshop or Photoshop Elements—have such tools built in. But, as anyone who has visited my Web sites can attest, I'm not a full-time graphics person and, therefore, don't need to use those programs often. So taking the time to launch a program as big as Elements just to get the hex-encoded values for a color is a bit much.

I've started using R.A.D. Productions' free ColorTagGen .01 (4.5; www.radproductions.net). In a simple two-window interface, ColorTagGen displays the RGB and hex-encoded color values for any selected color. You just pick the color you're looking for using one of the five selection modes, and the app gives you the corresponding code—there's even a Copy HTML button that copies the code to the Clipboard for pasting into your HTML document. Now ColorTagGen's abilities are just a hot key away.—ROB GRIFFITHS

then drag the desired folder into the Terminal window and press return.)

For people who don't use contextual menus much, another option is Marc



Pick a Winner ColorTagGen gives you quick access to HTML and CSS color-tag information.

Liyanage's free Open Terminal Here (4.5; www.entropy.ch), an AppleScript-based application that you can place in the toolbar or sidebar of Finder win-

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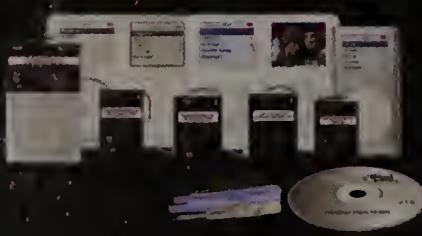
Boost your iPod's playtime with a Sonnet iPod battery — everything is included, from the proper tools

to easy-to-follow video instructions. Listen to your tunes anywhere you go with a Podfrēq™ or Podfrēq mini. Charge your iPod® while on the go with our USB Power Adapter. Sonnet iPod accessories let you love your iPod even longer!

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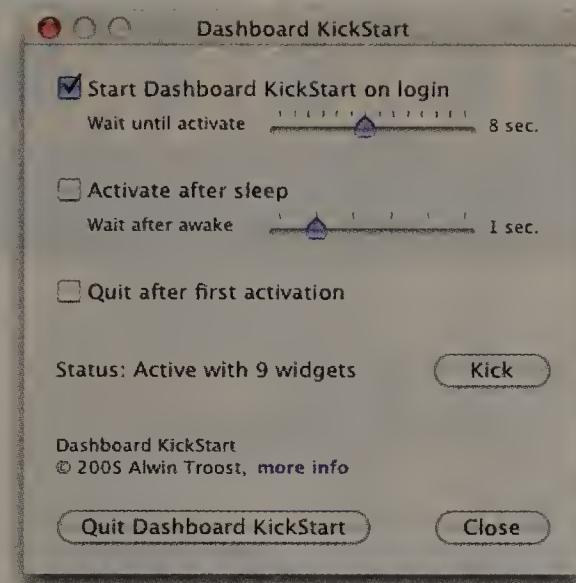
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dows. You can use it in two ways. First, if you're currently in the Finder folder that you want to use in Terminal, click on the Open Terminal Here icon in the toolbar or sidebar of that Finder window. The second way—especially useful if you aren't currently viewing the desired Finder window—is to drag a Finder folder onto the Open Terminal Here icon in the Finder (or in the Dock, if you've added Open Terminal Here to the Dock). Again, a new Terminal window will open with that folder as the current working directory.

WIDGET LOADER

Dashboard KickStart 2.0

Tiger users know it takes a long time to launch Dashboard the first time after you start up your Mac, log in, or even quit the Dock. That's because you have to wait for all your widgets to load and, in some cases, connect to the Internet to retrieve information. For me, it takes a good 10 to 20 seconds before I can use any of the widgets—not an eternity, but certainly a



Rise and Shine Give your widgets an early jolt with Dashboard KickStart.

long time for a feature that's supposed to provide instant access.

You don't have to be viewing Dashboard for your widgets to load, however. If you quickly view and then hide Dashboard—for example, when you first log in—your widgets will load and, if necessary, do their Internet business in the background. The next time you activate Dashboard, it will be ready to go immediately. However, this tip depends on your remembering to do the Dashboard

two-step. If you log out and then back in and forget to view Dashboard, the first time you try to use it you'll be back to the waiting game.

I solved my Dashboard delays using Alwin Troost's free Dashboard KickStart 2.0 (www.alwintroost.nl). This handy application runs invisibly in the background and quickly invokes Dashboard whenever the Dock (which controls Dashboard) launches—then it whisks Dashboard away just as quickly. When you really want to use Dashboard, it's ready and waiting.

Because Dashboard KickStart runs perpetually, it doesn't just work its magic when you log in; it also gives Dashboard that initial push after you or a software installer quit and relaunch the Dock, or after your Mac wakes from sleep. Dashboard should do this preloading of widgets on its own—but until Apple adds such functionality, I'm keeping Dashboard KickStart running on all my Macs. □

DAN FRAKES (www.danfrakes.com) is a senior editor at *Macworld*. Send your thoughts on this column, or on things you'd like to see in future columns, to macgems@macworld.com.

An advertisement for Kerio MailServer. It features a photograph of a person's hand writing "in work" on a notepad. In the background, a computer monitor displays the Kerio MailServer software interface, showing a calendar and other email-related data. A large red banner across the middle of the ad contains the text "Let me just check my calendar..." in white. Above the banner, there is a line of text: "Connect • Communicate • Collaborate • Securely".

Kerio MailServer

A groupware alternative to Exchange that syncs calendars, contacts and email with Entourage and Outlook. Integrated anti-spam and McAfee virus filtering provide secure, junk-free email for users on any platform.

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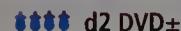
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DUAL-LAYER DVD BURNER

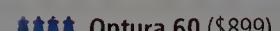


d2 DVD±RW 16x FireWire with Double Layer (\$129), from LaCie (www.lacie.com):



This unit can burn 8.5GB of data to dual-layer DVDs (which offer twice the capacity of single-layer discs). Its performance is very good overall—it burns 2.4x-rated dual-layer media at 4x. It supports OS X 10.4 (Tiger) and iLife (except for iDVD), and it comes with the full version of Roxio's Toast Titanium (April 2005; macworld.com/0313).

MINIDV CAMCORDER



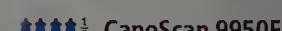
Optura 60 (\$899), from Canon (www.canon.com):

The Optura 60 shoots excellent video (as long as you have enough light) with true-to-life, vibrant color. It also offers optical image stabilization, a true 16:9 wide-screen mode, and extensive manual controls for creative flexibility. It snaps decent still images, too (macworld.com/0621).



FLATBED SCANNERS

MIDRANGE SCANNER

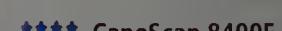


CanoScan 9950F (\$400), from Canon (www.canon.com):



The CanoScan 9950F offers improved scan quality and more-intuitive software controls. This model tops its predecessor, the 9900F, in almost every way (macworld.com/0188).

LOW-END SCANNER



CanoScan 8400F (\$150), from Canon (www.canon.com):



The 8400F has limited transparency support but is a great all-around scanner (macworld.com/0187).

MACS

DESKTOP

Product	Processor	Display	Rating	More Information	Best Price ^A	Speedmark Score ^B
iMac	G5/1.9GHz	17 inches	4 1/2	macworld.com/0943	\$1,249	178
	G5/2.1GHz	20 inches	4 1/2	macworld.com/0944	\$1,598	190
eMac	G4/1.42GHz (Combo drive)	17 inches	4 1/2	macworld.com/0602	\$639	140
	G4/1.42GHz (SuperDrive)	17 inches	4 1/2	macworld.com/0603	\$799	142
Mac mini	G4/1.25GHz (Combo drive)	not included	4 1/2	macworld.com/0316	\$429	100
	G4/1.42GHz (Combo drive)	not included	4 1/2	macworld.com/0321	\$519	115
	G4/1.42GHz (SuperDrive)	not included	4 1/2	macworld.com/0709	\$599	115
Power Mac	G5/quad-core 2.5GHz	not included	4 1/2	macworld.com/1031	\$3,048	257
	G5/dual-core 2GHz	not included	4 1/2	macworld.com/0942	\$1,885	215
	G5/dual-core 2.3GHz	not included	4 1/2	macworld.com/0945	\$2,288	236
	G5/dual-2.7GHz	not included	4 1/2	macworld.com/0606	\$2,520	253

PORTABLE

iBook	G4/1.33GHz	12 inches	4 1/2	macworld.com/0705	\$950	106
	G4/1.42GHz	14 inches	4 1/2	macworld.com/0706	\$1,225	111
PowerBook	G4/1.5GHz	12 inches	4 1/2	macworld.com/0399	\$1,299	not tested
	G4/1.67GHz	15 inches	4 1/2	macworld.com/0946	\$1,680	135
	G4/1.67GHz	17 inches	4 1/2	macworld.com/0947	\$2,079	134

^AFrom a PriceGrabber survey of retailers as of December 14, 2005. ^BSpeedmark 4 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.4 (Tiger). For information on Speedmark testing, go to www.macworld.com/speedmark.

LCD MONITORS

23-INCH DISPLAY

L2335 (\$1,299), from Hewlett-Packard (www.hp.com):



Along with its outstanding value and ability to pivot to portrait mode, the L2335 also provides excellent video-in options and very good color fidelity and viewing angle (March 2005; macworld.com/0278).

20-INCH DISPLAY

MultiSync LCD2070NX (\$799), from NEC Display Solutions (www.necdisplay.com):



The MultiSync LCD2070NX is great for people who want a moderately priced 20-inch monitor that can display bright, accurate colors (macworld.com/0636).

19-INCH DISPLAY

SDM-HS95P (\$550), from Sony (www.sony.com):



This display lacks some features found on other displays (such as a USB hub, speakers, and the ability to pivot), but it's a bright and nicely designed LCD that performs well (macworld.com/0638).

NEW: PHOTO INK-JET PRINTERS



Stylus Photo R340 (\$200), from Epson (www.epson.com):

For home use, Epson's Stylus Photo R340 prints the best color photos in its class. Its ability to print to CDs and DVDs extends its usefulness. Its only weakness as a photo printer is its subpar black-and-white prints (page 36; macworld.com/0948).



Pixma iP6600D (\$200), from Canon (www.canon.com):

The Pixma's six inks print great-looking photos with or without your Mac's help. Though its text printed on plain paper is a little lacking, it sets itself apart from the pack by offering a large color LCD and built-in automatic duplexing (page 36; macworld.com/0950).

FIREWIRE DRIVES

DESKTOP DRIVE

Black Series Triple Interface, 250GB (\$240), from Iomega (www.iomega.com):



You can't go wrong with its speed, connection options, and low price per gigabyte (macworld.com/0580).

ALSO RECOMMENDED:

Mercury Elite-AL Pro 7,200 rpm FireWire 800/400+USB2, 250GB (\$220), from OWC (www.macsales.com):



It's fast, has various connection options, and can boot OS X via FireWire (macworld.com/0580).

PORTABLE DRIVE

Mercury On-the-Go 7,200 rpm 8MB, 60GB (\$225), from OWC (www.macsales.com):



Loaded with useful utilities, this little drive has good connection options and an eye-catching design (macworld.com/0580).

ALSO RECOMMENDED

ComboGB, 60GB (\$250), from Wiebetech (www.wiebetech.com):



This drive has a lot of connection options and is fast, but it comes at a relatively high cost per gigabyte (macworld.com/0580).

DIGITAL CAMERAS

BUDGET CAMERA

Photosmart M22 (\$150), from Hewlett-Packard (www.hp.com); macworld.com/0595



FOR DIGITAL PHOTO BEGINNERS

PowerShot SD400 (\$399), from Canon (www.canon.com); macworld.com/0634



FOR INTERMEDIATE SHOOTERS

C-7070 Wide Zoom (\$600), from Olympus (www.olympus.com); macworld.com/0577



FOR ADVANCED AMATEURS

Image Z5 (\$649), from Konica Minolta (www.konicaminolta.com); July 2005; macworld.com/0534



DIGITAL SLR CAMERA

EOS Digital Rebel XT (\$899; with lens, \$999), from Canon (www.canon.com); July 2005; macworld.com/0535



IN THE MACWORLD LAB

Hardware Products We Tested This Month

GENERAL-PURPOSE INK-JET PRINTER

Deskjet 5940 (\$100), from Hewlett-Packard (www.hp.com):



The Deskjet 5940 is a good all-around performer, printing excellent text and very good photos. It was poky on one of our speed tests but is near average with other tasks (macworld.com/1012).

GENERAL-PURPOSE INK-JET PRINTER

Stylus C88 (\$80), from Epson (www.epson.com):



Four smudge- and water-resistant inks in individual ink tanks do a respectable job on everything from text to photos. The C88 is short on extras but is a terrific value (macworld.com/1014).

DESKTOP FIREWIRE DRIVE

d2 Hard Drive Extreme with Triple Interface, 300GB (\$259), from LaCie (www.lacie.com):



With almost every imaginable connection option, a low price per gigabyte, and top performance, this desktop drive is a winner (macworld.com/1013).

24-INCH DISPLAY

Ultrasharp 2405FPW (\$1,199), from Dell (www.dell.com):



At default settings, the 23-inch Ultrasharp wasn't quite as saturated and bright as we'd expect. But with a vast amount of screen space, tons of connection options, a built-in camera-card reader, and a USB hub, it's a good performer and a very good value (macworld.com/1015).

20-INCH DISPLAY

SyncMaster 204T (\$599), from Samsung (www.samsung.com):



The midsize 204T color LCD looked a little blue out of the box, but tweaking its settings helped. Also, this monitor's stand is height-adjustable (macworld.com/1016).

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we will update the list. For longer reviews of these products and for other product recommendations, go to www.macworld.com/reviews.

THE MULTIMED MAC

Is the New iMac G5 Ready
to Replace Your Home
Entertainment Center?
We Give It an Audition.

First came the iPod and iTunes. The video iPod, and deals with TV networks and TiVo, followed. And now Apple, with its new iMacs and Front Row software, is taking another step into a future where music and video are as important to the company as computers.

But just how bright is that future? We looked at Apple's latest multimedia hardware and software to find out what it can do and to see where it might be headed.

We gave Senior Editor Christopher Breen a scary assignment: to use one of the new iMacs as his only source for music, TV, and radio for a week. We asked Alan Stafford, a senior editor at our sister publication *PC World*, to compare the iMac's media interface, Front Row, with its older, more developed counterpart, Windows Media Center. We also asked *Game Room* columnist and Macworld.com Senior News Editor Peter Cohen to compare the video-friendly iPod to another portable device that plays video, Sony's PlayStation Portable. Finally, we had Senior News Editor Jonathan Seff recommend some products that'll help you turn any old Mac into a multimedia entertainment system.

Their collective conclusion: When it comes to Apple's conversion from computers to multimedia, the future is close but hasn't arrived yet.

ILLUSTRATION BY JOHN KOCON



IA



MY WEEK WITH THE iMAC

BY CHRISTOPHER BREEN

If you buy the hype, the new iMac G5 is more than just a computer. Thanks to the addition of the Apple Remote and Front Row, it's a stand-alone multimedia center that can play music and commercial DVDs in lush 5.1 surround sound (as long as you've got the right speakers, cable, and adapter), and project your iPhoto albums as slick slide shows.

But is there substance beneath that hype? To find out whether I could replace my television set, TiVo, home theater receiver, and 5.1 audio system (all controllable from the comfort of my couch) with a remote-controlled Mac-centric media center, I tricked out an iMac G5 with a select group of third-party peripherals and committed myself to using nothing but the iMac for all my media consumption for a week.

Details of my experiment follow, but I can safely say that while the iMac could serve as a dandy little second system, or as a starter setup for students or first-time apartment dwellers, my home AV gear won't be appearing on eBay anytime soon.

Naked Came the iMac

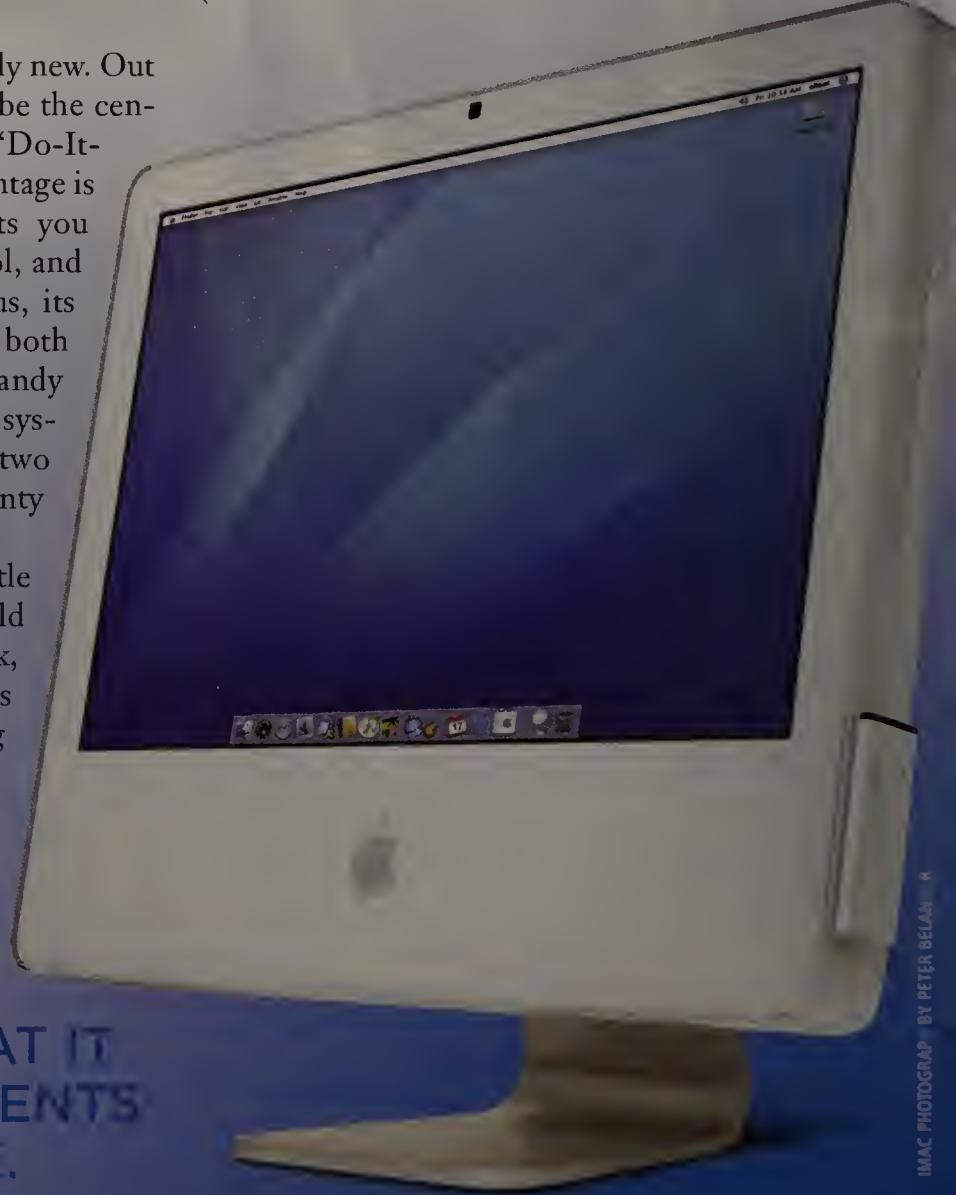
Of course, the new iMac G5 isn't radically new. Out of the box, every Mac sold today could be the centerpiece of your multimedia life (see "Do-It-Yourself Multimedia"). This iMac's advantage is that it packs more of the components you need—a large monitor, a remote control, and stereo speakers—into one package. Plus, its audio-output port can accommodate both analog stereo and digital 5.1 audio—handy for connecting to an external speaker system—and its three USB 2.0 ports and two FireWire 400 ports let it connect to plenty of peripherals.

That said, for the purposes of my little experiment, the 17-inch iMac just would not do. Its screen is big enough for work, but for watching movies and slide shows from across a room, you need something bigger. So I opted for Apple's stock 2.1GHz iMac G5 with a 20-inch display (; macworld.com/1031).

After I had unpacked the iMac and loaded it with pictures, music, and a

few movies, I spent some time with it, to see how well it performed without peripherals. For the most part, it performed well. It couldn't do TV, of course, but DVDs and photo slide shows looked very nice. While its on-board audio didn't exactly rattle the rafters, the sound was far less tinny than I expected and perfectly adequate for movies and most tracks in my iTunes library, as long as I wasn't feeling too picky.

Front Row was another matter altogether. At first, I thought it was great eye candy. But as I used it, its limitations became more apparent. Sure, Front Row will let you navigate through your iTunes library and control a DVD you've popped into the SuperDrive. But on more than one occasion, the application responded so slowly to the remote that I found myself frantically pressing the remote's Menu button multiple times, thinking that the first try hadn't registered. And although the interface controls are iPod-like, moving from one menu to another was cumbersome. All in all, while Front Row is functional, it feels incomplete. (For another take on Front Row's



THIS MAC'S ADVANTAGE IS THAT IT PACKS MORE OF THE COMPONENTS YOU NEED INTO ONE PACKAGE.

pros and cons, see "What Apple Could Learn from Microsoft.")

So when it comes to multimedia, the new iMac, unadorned, is not that different from the previous generation of iMacs—and its remote control and software underwhelmed me. But what would happen if I really tricked out the iMac, so it could show and record radio and TV shows, play commercial DVDs, and let me control everything from across the room?

Sound Experience

My iMac makeover started with the audio system. As I say, the built-in speakers sound surprisingly good, considering that they're buried inside the computer's slim case. But while they're fine for watching old episodes of *The Rocky and Bullwinkle Show*, they just don't have the power you want when you're watching blockbuster movies that are longer on special effects than on plot.

DO-IT-YOURSELF MULTIMEDIA

If you want a Mac that plays music and movies, you could buy one of the new iMac G5s and trick it out, as Christopher Breen did. But if you're not in market for a new computer, or if you want features that the iMac doesn't offer, you can build your own media center out of almost any relatively up-to-date Mac.

Speakers The speakers Christopher used to expand his iMac will work great for anyone with a Power Mac G5 or an iMac G5 (both support multichannel audio output)—you can hook up a 5.1-channel speaker system to either system. Although there are several options, I think the Logitech Z-5450 system that Christopher chose is one of the best.

If you have a Mac mini or a laptop, and you're limited to the standard audio line-out jack, then speakers that use a minijack connector—such as the Altec Lansing FX-6021 (\$250; www.alteclansing.com) or RSL Digital Fidelity One (**4½**; macworld.com/1032)—will do just fine.

Display If you don't have an iMac, you can't rely on a built-in display. (And if you do have one, you may not want to rely on it.) For viewing movies and TV shows, Apple's 30-inch Cinema HD Display (**4½**; macworld.com/1033) is undeniably beautiful—but at \$2,500, it's beyond the reach of most people. Apple's 23-inch wide-screen Cinema Display (**4½**; macworld.com/0278) and several comparable LCD monitors offer 1,920-by-1,200-pixel resolution—enough to display every pixel of 1080i (1,920-by-1,080) High-Definition (HD) video—and are therefore more-reasonable options.

In a recent review of 23-inch displays (macworld.com/0278), our top pick was Hewlett-Packard's \$1,400 L2335 display (**4½**), which provides composite, component, and S-Video inputs (in addition to DVI and VGA ports). Since that review, several promising big-screen displays have appeared, including Dell's 24-inch UltraSharp 2405FPW (\$1,200; www.dell.com). All are supported by

Plextor ConvertX PVR



the standard video cards in Mac minis and Power Macs.

TV Tuner To view and record TV from analog cable or antenna sources, any Mac owner can use the Elgato EyeTV 200, which Christopher chose. The Plextor ConvertX PVR (macworld.com/0354) costs \$100 less than the EyeTV 200 and comes with Elgato's excellent EyeTV software, but it uses USB 2.0 instead of FireWire to connect and doesn't come with a remote (the EyeTV does). For people who have upgraded to a huge HD display, Elgato's EyeTV 500 (\$350; www.elgato.com) lets your Mac receive and display free, over-the-air (ATSC) digital signals in both SD and HD, as well as unencrypted (Clear QAM format) digital cable. For 1080i HD signals, however, you'll need a dual-processor or dual-core Power Mac G5.

Remote Control While Apple's wireless remote control is one of the new iMac's big selling points, there are other, better ways to control your Mac from afar. The Belkin MediaPilot that Christopher chose is flawed but adequate. For more-basic control, Keyspan's 17-button Express Remote (\$60; www.keyspan.com) includes key maps for iTunes, QuickTime, and DVD Player, as well as soft-

ware that lets you configure the remote for other apps. Macally's KeyPoint (\$49; www.macally.com) includes a mouse pointer-pad with two buttons, and a built-in laser pointer.

Radio As Christopher says, the best way to receive local radio broadcasts on your Mac is with Griffin Technology's \$70 Radio Shark combined with RadioTime's terrestrial and Internet radio guide and recording scheduling.

Hard Drive No matter what kind of Mac you want to turn into an entertainment center, you may also want to consider getting an additional hard drive. Music and photos take up a lot of room. Throw video into the mix, and your storage requirements go up rapidly.

With Power Macs, there's room for at least one extra internal drive, and you can add a 500GB Serial ATA drive for around \$360. PriceWatch (www.pricewatch.com) is an excellent place to search for and compare hard drives.

With other Mac models, you can either upgrade the internal drive or buy an external FireWire or USB 2.0 drive (for reviews of FireWire hard drives, see macworld.com/0580). Even if you have space for an internal drive, you might prefer the portability of an external one.—JONATHAN SEFF

**Logitech Z-5450
Digital 5.1 Speaker
System**



**Griffin Technology
XpressCable**



To beef up the iMac's sound, I chose Logitech's Z-5450 Digital 5.1 Speaker System (\$500; www.logitech.com). These speakers sound great (despite their small size); the rear speakers connect wirelessly to the control unit (you *do* have to plug each into an electrical outlet); and the system supports three digital inputs (two Toslink and one coaxial).

Once I had unpacked the speakers, I grabbed a spare Toslink cable, only to then utter a mew of disappointment when I realized that (unlike my Power Mac G5) the iMac had no Toslink connector.

Worse, Apple doesn't even include a Toslink-to-minijack adapter in the box. Fortunately, I found that I had a spare Griffin Technology XpressCable (\$20; www.griffintechnology.com), which includes two such connectors.

I plugged the speakers into the control unit and tethered the control unit to the iMac with the Toslink cable and adapter. The Output portion of

FEARING I WAS DISTURBING THE REST OF MY FAMILY, I TRIED TO TURN DOWN THE VOLUME. NO GO.

the iMac's Sound preference pane then proudly displayed Digital Out as its chosen option.

I pressed the Optical button on the Logitech remote control until the control unit showed Input Optical

1. Then I inserted the first disc of *The Lord of the Rings: The Return of the King* into the iMac's SuperDrive, waited for DVD Player to pop up, selected Play Movie, and fell back in wonder when glorious 5.1 sound filled the room.

Then, fearing I was disturbing the family, I tried to turn the volume down with the Apple Remote. No go. This remote (and the volume keys on the Apple keyboard) can't control the volume of the iMac's digital audio output. For the time being, that meant I needed two remotes to enjoy my DVD movies: the Apple Remote, for navigating DVD menus via Front Row, and the Logitech remote, for controlling the speakers.

While the speakers certainly gave the necessary *oomph* to my DVDs, they just couldn't match the sound of my tried-and-true B&W home stereo speakers when it came to music playback. Although you can adjust the levels of each speaker (adding and subtracting bass by changing the subwoofer setting), the small satellite speakers and subwoofer don't offer the same rich audio experience as a pair of well-balanced stereo speakers that contain full-size speaker cones.

Channeling Television

Next, it was time to turn the iMac into a television and personal video recorder. For that, I chose Elgato's EyeTV 200 (; macworld.com/0629). The unit, which is the size of a paperback book, accepts a TV signal from an antenna, a cable box, or a satellite receiver (via composite, S-Video, or antenna ports); encodes the signal as MPEG-2 or MPEG-4 video; and sends it to your Mac, over FireWire, for live viewing. Like a TiVo (and other video recorders), the EyeTV 200 lets you pause and replay live television, record programs for later viewing, schedule recordings, convert recordings for viewing on other devices (for instance, portable players such as Sony's PlayStation Portable and Apple's iPod with video), and change channels on compatible tuners.

That last feature was particularly important for me. I live in the cable-less boonies and have terrible antenna reception. Out here, it's satellite or nothing. Regrettably, in terms of channel changing and the EyeTV, that leaves me with nothing. Unlike Series2 TiVo models, which include infrared adapters that let you change channels on a cable or satellite



**Elgato
EyeTV 200**

WHAT APPLE COULD LEARN FROM MICROSOFT

FRONT ROW VERSUS WINDOWS MEDIA CENTER

While the iMac G5's software interface for multimedia—Front Row—is new to the Mac platform, Windows users have had similar tools—in Microsoft's Windows XP Media Center Edition—for a couple of years now. Is it possible that, as Front Row matures, it could learn a thing or two from Windows?

Feel the Music

For music, Front Row gives you a large, text-only interface with few options. You can shuffle the playback order of songs and search by several criteria. You can't create playlists, but you can access playlists you've already created in iTunes. And you can't browse Internet radio stations, but you can access stations you've bookmarked in iTunes.

Media Center gives you those same navigational and playback tools, and then it goes a couple of steps further. It shows album artwork. It also provides a search engine that will show results as you enter characters on the remote control. Some Media Center PCs have over-the-air radio tuners, but the software will also let you access Internet radio stations.

You can't browse or buy new songs through Front Row; for that, you must use iTunes. Media Center displays a prominent Buy Music button once you start playback, but clicking on it calls up a page of albums and a "Not designed for Media Center" message. In other words, it doesn't work any better than Front Row.

DVDs on the Menu

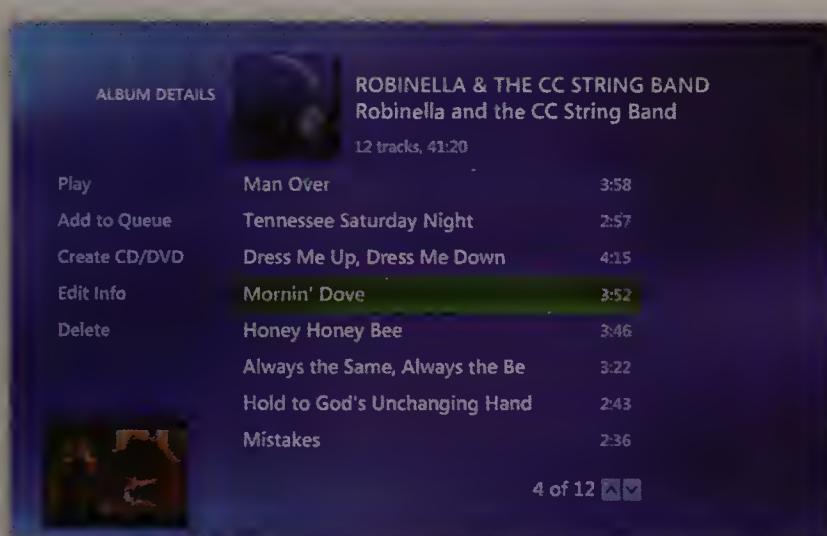
Because the iMac G5's remote has only six buttons, the fast-forward and fast-reverse buttons must do double duty as chapter-advancing buttons. And you can't adjust the volume until after you begin playback. DVD playback is pretty simple, but I still found that I often pressed the wrong buttons, in part because response on the 20-inch iMac I used was surprisingly lethargic.

The remote control supplied with the Sony VAIO VGC-RB42G Media Center PC I tried

out had dedicated buttons for nearly every DVD function, so it was easy to look at the remote and pick exactly what I wanted to do. The interface was quite snappy, so I always got quick confirmation that my button presses had registered.

Straight to Video

Front Row gives you easy access to movie files and video Podcasts stored on your iMac, and to movie trailers stored on Apple's serv-



ers. You can play back TV shows, too, but you have to use iTunes to find and purchase them. Everything plays back in a full-screen window, which makes the 320-by-240-pixel TV shows look pretty fuzzy.

Media Center lets you play back videos of all sorts on your PC, and it lets you burn them to CD or DVD with a couple of clicks. But it also gives you access to tons of online content, including movies from CinemaNow (www.cinemanow.com), prerecorded television shows from Akimbo.com, and news broadcasts from Reuters and other services. One huge irritation with Media Center is that clicking on some buttons calls up ads for paid content.

But when it comes to television, Media Center's biggest advantage over Apple's offerings is that you can connect a Media Center PC to a TV, often through high-quality component connections. Media Center plays, pauses, and records television programs; if the PC has a TV-tuner card with two tuners, it can simultaneously record two programs and play back a third. You can add an external TV

tuner and digital video recorder, such as Elgato Systems' EyeTV, to the iMac G5, but Front Row won't have anything to do with it.

Currently, you can view over-the-air High-Definition (HD) broadcasts only with Media Center, and then only if the PC's TV card supports HD. Microsoft recently announced that Media Center PCs with CableCard support will appear by the 2006 holiday season; those systems should be able to play, pause, and record HDTV programs, without the need for a set-top cable box.

A Media Center PC particularly outdoes the iMac in one area: it can act as a server, distributing content (including time-shifted television) to other devices throughout the house. Those devices include Media Center Extenders—Linksys's WMCE54AG, for example, which sells for about \$250—and the new Xbox 360 (\$400), which has built-in wireless networking.

I tried out an Xbox Extender, a \$35 device that lets you stream Media Center content to a previous-generation Xbox. It worked very well with a wired Ethernet connection, but you can also use it with a wireless adapter.

Playing Catch-Up

When it comes to controlling a multimedia computer, OS X isn't anywhere near Windows XP Media Center Edition. But Media Center has been around for more than three years; comparing the fledgling Front Row to it is about as fair as comparing a bicycle to a Buick. And Apple's success with digital audio players—which weren't new when it began selling them—shows that the company can enter a product category and outdo the competition by offering better features and more style.

Clearly, Mac users are not going to be buying Media Center-equipped PCs anytime soon (and the same is true for Windows users and iMacs). But if Front Row picks up some of the extra features that Media Center has acquired over the years, those users may soon have reason to be very, very happy.—ALAN STAFFORD

receiver, the EyeTV can change channels only with antenna connections or cable connections that don't require a cable box.

But as I explored the EyeTV software and its interaction with my Dish 311 satellite receiver, things became a little less grim. The Dish 311 receiver's Timers function lets you create schedules that force the receiver to switch channels at times you choose. By coupling those schedules with programming calendars I created using the TitanTV online TV-scheduling service (www.titantv.com), I was able to create TiVo-like recordings. Granted, the process was clumsy: the Dish receiver is slow to accept the many button pushes necessary to create a schedule. However, all that toil eventually paid off in some successfully time-shifted programming.

IF YOU'RE LOOKING FOR A CLEAR PICTURE, YOU SHOULDN'T TRY TO WATCH TV ON YOUR MONITOR.

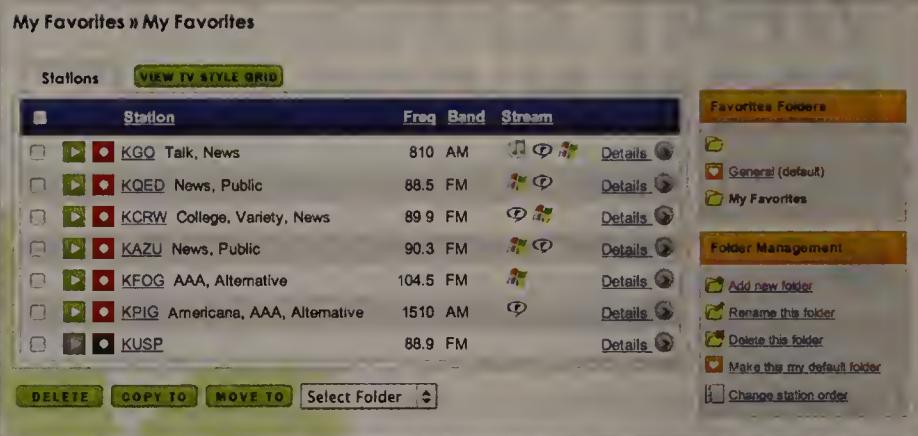
Unfortunately, while DVDs look great on a computer monitor if you're close to it, the same can't be said for standard 640-by-480 television programming. At normal size, the television picture was fine but too small to be viewed from across the room. When I chose Enter Full Screen from EyeTV's View menu, I got the banding and streaking you always get when you view television images on a computer's high-resolution monitor. If you're looking for a clear picture, you shouldn't try to watch TV on your computer monitor.

Radio Radio

Movies on DVD: check. Music: check. Television: check. The only thing left in my iMac-as-home-entertainment-center experiment was good old-fashioned radio.

To replace the radio built into my home stereo, I chose Griffin Technology's Radio Shark (\$70; www.griffintech.com), a radio tuner that connects to your Mac via USB. After installing the Radio Shark 2.0 software on

**Griffin Technology
Radio Shark**



Time Your Radio RadioTime lets you listen to more than 37,000 radio stations—and, for an extra fee, lets you record your favorite shows.

the iMac, I plugged the unit into a free USB port, launched the program, and tuned in a couple of my favorite local stations. The Radio Shark's reception was about the same as what I get from the stereo receiver in my office: not terrible but not impressive. Adding a USB extension cable improved reception somewhat.

The Radio Shark software let me manually schedule radio broadcasts, but I wanted an experience similar to the one that TiVo provides: I wanted to sift through a program guide and create a schedule for unattended recordings of both local and Internet radio.

The solution was RadioTime (www.radiotime.com), a Web-based service that lets you listen to more than 37,000 music and talk stations from around the world through a client (which, in turn, channels its music through Microsoft's Windows Media Player or RealNetworks' RealPlayer). If you're willing to shell out \$39 a year, RadioTime will let you schedule and record those programs. (RadioTime also offers two package deals: For \$59 a year, you get the RadioTime service plus an FM tuner; for \$79, you get that plus the Radio Shark.) If you've attached a compatible radio receiver such as the Radio Shark to your computer, you can tune it through the RadioTime client and record its output.

RadioTime worked as advertised on the iMac, grabbing scheduled audio both from the Radio Shark and from RadioTime's broadcast streams, and placing them in the automatically generated RadioTime playlist in iTunes. Unfortunately, the quality of the recordings is only as good as the Radio Shark's reception or the audio stream. To my ears, a local station with a strong signal played through a good home stereo sounds better, particularly when compared with recorded streams.

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XtremeMac

Gaining the Upper Hand

After adding all these peripherals, I was using a total of four remote controls: the Apple Remote for controlling the iMac iLife libraries, the Logitech remote for sound, the Dish satellite remote for tuning television channels, and the EyeTV remote for recording television channels. Enough already! That's why I added Belkin's MediaPilot (\$100; www.belkin.com), a rechargeable wireless keyboard with a built-in pointer and scroll wheel, to my iMac setup. The MediaPilot's assignable media keys, located above the standard keyboard, can do things such as launching your Web browser and e-mail client, opening your Movies folder, and controlling tracks and volume in iTunes. In AV mode, the

THE MEDIAPILOT COULD CONTROL BASIC FUNCTIONS JUST FINE. BUT I WANTED IT TO DO MORE.

MediaPilot can also control home entertainment devices such as television sets, AV receivers, and DVD players.

With its software installed and its internal batteries charged, the MediaPilot was able to control the iMac's basic functions just fine from across the room. But I wanted it to do more. I wanted it to launch Front Row, crank up the volume in DVD Player, race through an iPhoto slide show, pull up the TV guide on my Dish receiver, and—what the heck—flip open Safari so I could read the headlines from Google news.

I tried. And I got close. However, the MediaPilot couldn't do everything I wanted it to.

It managed the Mac-centric tasks with relative

ease. I assigned $\text{⌘}-\text{esc}$ (the key combination that opens Front Row) to the MediaPilot's Media key. With Front Row front and center, I could use the MediaPilot's arrow keys to navigate the menus. I also assigned the $\text{⌘}-\text{up}$ arrow and $\text{⌘}-\text{down}$ arrow key combinations—which control the volume in DVD Player, iTunes, and EyeTV—to the volume toggle switch on the MediaPilot.

The MediaPilot fared less well with the satellite receiver. Even though I'd configured the Belkin software to mimic my EchoStar remote, the MediaPilot could handle only a few of the commands that the EchoStar remote could. It allowed me to change channels by typing numbers or pressing the up or down arrow key. But it offered no keys that matched the first remote's Guide and Select buttons—vital functions when you're navigating hundreds of channels. You can "teach" the MediaPilot to mimic other remote controls—by pointing the original remote at the MediaPilot keyboard's infrared port and assigning one of the remote's buttons to a key on the keyboard. That's what I tried to do with those Guide and Select buttons. But the settings didn't always stick.

The MediaPilot performed better with the Logitech speakers. Unfortunately, the speakers' control unit responded more slowly to the MediaPilot than it did to its own remote. If this were my permanent media setup, rather than a job-related lark, I'd be happy to use the MediaPilot to control the Mac's applications, Front Row included. But I'd keep the Echostar and Logitech remotes on hand for watching TV or adjusting the speakers.

Couch-Bound for Glory

So can the iMac really serve as a home entertainment center? Not quite yet. This iMac—like almost any other Mac you can buy today—plays

**Belkin
MediaPilot**

M I C R O B L A S T P O R T A B L E S P E A K E R S Y S T E M

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XtremeMac

DVDs like a dream. When coupled with some great-sounding speakers, it provides a thoroughly satisfying movie-viewing experience.

Television is another matter altogether: the iMac's display, like all of today's computer LCDs, handles full-screen, standard-resolution television signals with something less than aplomb. And an iMac-EyeTV combination will pose no threat to TiVo as long as the EyeTV can't change channels on a satellite receiver or cable box.

With a strong radio signal, a service such as RadioTime has huge potential, since it provides an easy way to time-shift more programming than I could listen to in a dozen lifetimes. And while the whole mess would benefit greatly from a single

full-featured universal remote control, neither Apple nor any third-party manufacturer currently provides one.

In short, the new iMac G5 is a perfectly wonderful computer, but it and its peripheral pals have more work to do before they're going to be able to muscle aside the AV gear in my living room. However, as a second, light-use media center for my office? Just add a couch, a small fridge, and a remote-control caddy, and I'd be happy to live with the iMac's limitations. □

Senior Editor CHRISTOPHER BREEN is the author of *Secrets of the iPod and iTunes*, fifth edition (Peachpit Press, 2004), and *The iPod and iTunes Pocket Guide* (Peachpit Press, 2005).

WHAT APPLE COULD LEARN FROM SONY

SLet me say it up front: Playing video isn't the strong suit of either Apple's new iPod or Sony's PlayStation Portable (PSP). The iPod is primarily a music player, and the PSP is primarily a video-game system. But both play video very well, so it may be beneficial to compare the two, to see what (if anything) Apple can learn from Sony—and vice versa.

The comparison starts with the screen. The new iPod's 2.5-inch display is colorful and bright; to my eyes, it's just fine for music videos, home movies, and even the occasional TV show or movie. But the PSP's 4.3-inch screen is even better—and not just because it's bigger. Its wide-screen aspect ratio is perfect for movies and videos.



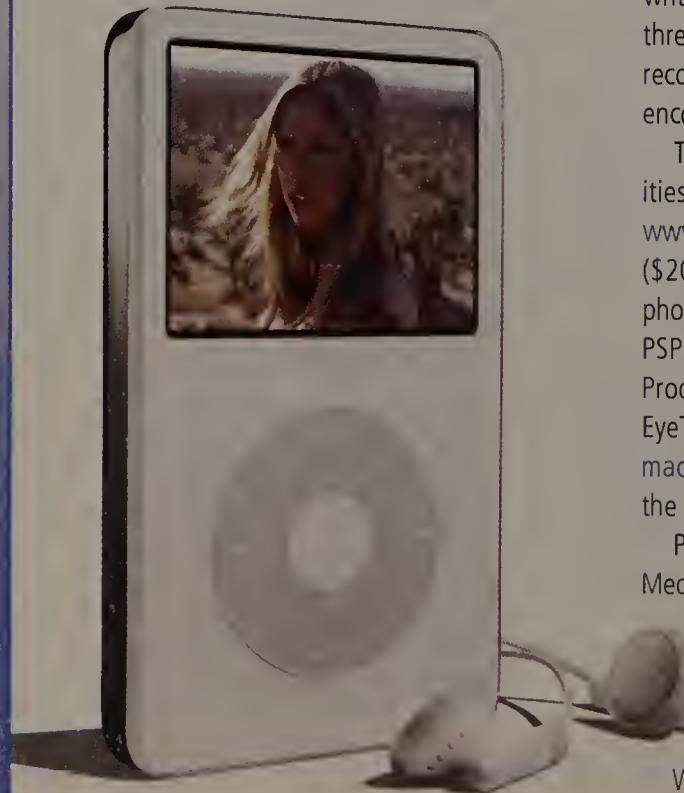
Then there's storage capacity. The iPod has a 30GB or 60GB hard drive, while the PSP doesn't have a built-in hard drive at all. Instead, it stores data on Sony's Memory Stick Pro Duo flash media cards, which (as of this writing) max out at 2GB—enough for two or three feature films or several hours of TV recordings, after you've compressed and encoded the video for PSP playback.

There are several ways to do that. Two utilities—Nullriver Software's PSPWare (\$15; www.nullriver.com) and RnSK Softronics iPSP (\$20; ipsp.kaisakura.com)—transfer movies, photos, and music from your Mac to your PSP; each can also convert video. Kinoma's Producer (\$30; www.kinoma.com), Elgato's EyeTV, and Roxio's Toast 7 Titanium (**4½**; macworld.com/0856) also have presets for the PSP.

PSP can also play movies in the Universal Media Disc (UMD) format. An increasing number of UMD movies are available at electronics retailers and superstores, for \$15 to \$30. They save you precious card space, and they look better. While the easiest way to get video onto

your iPod is to buy and download TV shows, music videos, and short movies from the iTunes Music Store, you can also move your own video content, either with QuickTime Pro or with a utility such as the open-source HandBrake (handbrake.m0k.org) or Splasm Software's inexpensive Podner (\$10; splasm.com). Podner is my favorite, because it supports drag-and-drop video conversions, and it even copies the file to iTunes once it's done, making video conversion almost idiot-proof.

So what could the iPod learn from the PSP? A bigger, wide-screen display would be nice. I also like the PSP's use of removable media, whether blank or with video content already on it; that's the way we're used to watching video in our living rooms, so why not do the same with a portable player? Combine flash media, UMD support, and the larger screen with the convenience of the iTunes Music Store and the iPod's big hard drive, and Apple could have a best-of-breed portable player. And if Apple could also learn a thing or two from Sony about gaming, so much the better.—PETER COHEN



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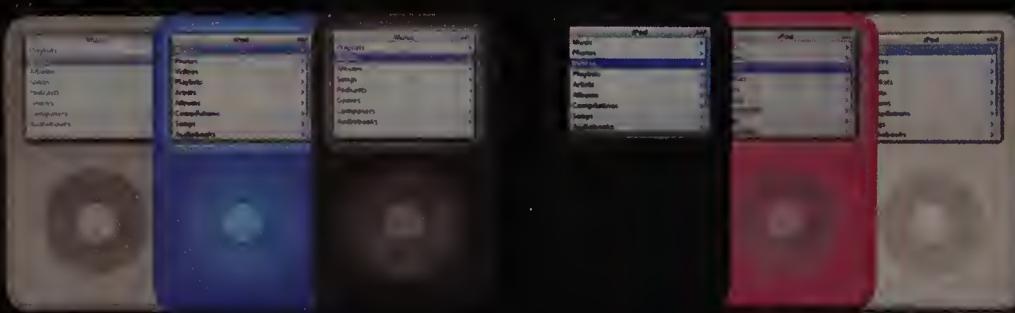


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Editors' Choice Awards

Think small.

That seemed to be the motto of Mac hardware and software makers in 2005. The year began with the introduction of the Mac mini and ended with the tiny iPod nano.

But don't let all this small talk lead you astray—2005 was a big year for Mac products. Whether you're talking about hardware or software, you can

find several dozen offerings that came up big in terms of value, performance, and innovation. The recipients of our annual Editors' Choice Awards are ample proof of that.

We've looked at every Mac product released between November 1, 2004, and November 1, 2005, and we picked 31 winners of all shapes and sizes. Some of them are small—but they all packed a big punch in the past year.

Best Hardware



COOL HOTSPOT FINDER

Digital Hotspotter

It's not hard to find a Wi-Fi hotspot. They're everywhere these days—and therein lies the problem. Sure, there are plenty of places for a mobile Mac user to get online wirelessly. But how many of those Wi-Fi networks are truly open—that is, usable by anyone wandering down the street? That's what makes Canary Wireless's **DIGITAL HOTSPOTTER** (4½; Mac Gems, April 2005) more than

a cute gadget—it doesn't just tell you that a Wi-Fi network is in your vicinity, it tells you the network's SSID, channel number, and signal strength, and whether it requires a password.—DAN MILLER

\$60; Canary Wireless, www.canarywireless.com

IPOD CLOCK AND SPEAKERS

iH5

A nightstand with an alarm clock, an AM/FM radio, and iPod speakers on it can get pretty crowded. iHome Audio's **iH5** (4½; macworld.com/0867) solves this problem by combining these three products in a single, compact package that reduces the clutter on your nightstand, desk, or kitchen counter—or any surface where you'd like to dock your iPod. Despite its low price, the iH5 doesn't compromise on quality or features—its sound quality and radio reception are quite good, its clock is large and bright, its dock-connector cradle charges your iPod, and it even looks great. Considering how much it would cost to get similar functionality from separate products, the iH5 is a steal. (An optional wireless remote control costs \$20.)—DAN FRAKES

\$100; iHome Audio, www.ihomeaudio.com

EYE-CATCHING IPOD

iPod Nano

If you're going to discontinue the best-selling iPod ever, you'd better make its replacement something special.

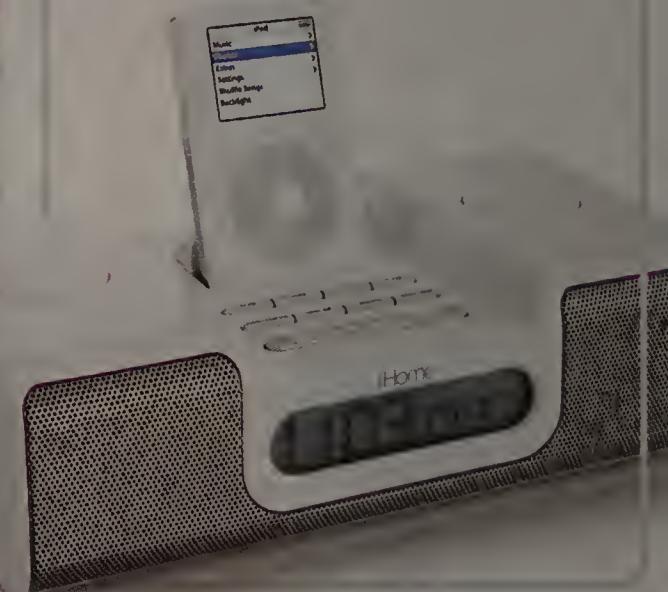
And—reports of easily scratched screens

aside—Apple did just that with the **iPOD NANO** (4½; December 2005). Despite

having a crisp color screen, a Click Wheel, a dock-connector port, and either 2GB or 4GB of storage space, the nano is about as thick as 15 business cards and weighs less than \$2 in quarters.

And the design—a sleek chrome back with a black or white front—is all iPod. We've toted around every model of the iPod that's ever existed, and we've found that no other version has spurred such an instantaneous "I must have that" reaction among people who lay eyes on it.—DAN FRAKES

2GB model, \$199; 4GB model, \$249; Apple, www.apple.com



More of the Best

HOME-OFFICE SCANNER

ScanSnap

The Fujitsu **ScanSnap** (4½; page 45) lets Mac users come one big step closer to a paperless future. The scanner is fast, knows when a piece of paper is double-sided or in color, and scans as many as 50 pages using its document feeder. It comes with a full version of Adobe Acrobat 7.0 Standard for manipulating the resulting PDFs. The arrival of a Mac-compat-

Hardware

ible ScanSnap is a fantastic development that could help the Mac platform gain a stronger footing in the business world.—JENNIFER BERGER

\$495; Fujitsu, www.fujitsu.com

CONSUMER DIGITAL SLR

EOS Digital Rebel XT

It seems as though everyone came out with a consumer-level digital SLR (single-lens reflex) camera in 2005—these cameras give you better control over your images and let you use interchangeable lenses. Despite tough competition, partic-

ularly from Nikon and its D50, Canon's

DIGITAL REBEL XT

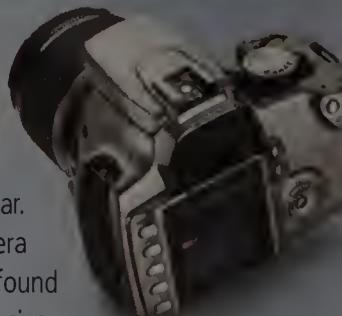
(4½; July 2005)

won our hearts this year.

This 8-megapixel camera offers all the features found in Canon's more expensive

20D camera, along with impressive speed and a compact, light body that won't weigh you down on long treks. For hobbyist photographers on the lookout for a camera they won't quickly outgrow, the Rebel XT is a great value.—KELLY TURNER

\$899; Canon, www.usa.canon.com





III NEXT-GENERATION IPOD

iPod with Video

At its heart, the new **IPOD** (4 1/2; January 2006) is just that: a new version of the best music player on the planet, with improvements such as a 2.5-inch color display; a thinner, lighter design; and new software features that make it even more desirable than its predecessor. But it also adds the attention-getting ability to play video. Perhaps most significant, these 30GB and 60GB iPods cost exactly the same as their smaller-screen, video-free predecessors. Certainly, the days of more-sophisticated handheld video players aren't far off. But when they do arrive, it will be because this particular iPod model helped pave the way.—DAN FRAKES

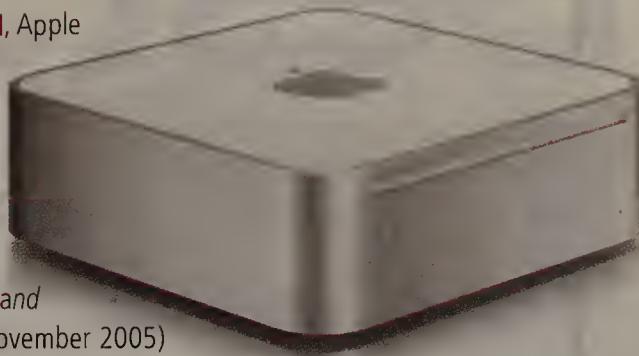
30GB, \$299; 60GB, \$399; Apple, www.apple.com

III LOWEST-COST MAC MODEL

Mac Mini

With the release of the **MAC MINI**, Apple did something its critics said could never be done: release a Mac with a price tag beneath \$500. But Apple didn't just toss third-rate Mac technology in a plastic box; instead, the Mac mini is a marvel in terms of engineering and price, packing a 1.25GHz (4 1/2; November 2005) or 1.42GHz (4 1/2; November 2005) G4 processor, a hard drive, a CD-RW/DVD-ROM optical drive, and wireless connectivity into an astoundingly small shell. A third configuration ships with a DVD-burning SuperDrive (4 1/2; November 2005). It's one of the best-designed computers we've ever laid our hands on.—JASON SNELL

1.25GHz, \$499; 1.42GHz, \$599; SuperDrive 1.42GHz, \$699; Apple, www.apple.com



III PORTABLE PHOTO PRINTER

PictureMate Deluxe Viewer Edition

Skeptical about stand-alone photo printers? Many people are. That may be why most people's pictures never make it out of digital form. Having a dedicated photo printer offers an easy way to turn those digital images into physical prints, and you couldn't ask for a better, more convenient portable ink-jet printer than the **PICTUREMATE DELUXE VIEWER EDITION** (4 1/2; September 2005). Offering the same great 4-by-6-inch photo prints and connection options as the original PictureMate, the Deluxe edition adds a beautiful, 2.4-inch color LCD for displaying and editing digital photos.

It also takes less time to print each photo and has an optional rechargeable battery. The latest PictureMate should convince even skeptics that photos are best seen and not stored.—JAMES GALBRAITH

\$200; Epson, www.epson.com



III DUAL-PLATFORM GRAPHICS CARD

Radeon 9600 Pro PC and Mac Edition

ATI has broken the rules by releasing a single video card—the **RADEON 9600 PRO PC AND MAC EDITION**—that works in both Power Macs and PCs. Compatible with AGP-equipped Power Mac G4s and G5s, the graphics card comes with 256MB of VRAM and two DVI connectors, including one that can drive a 30-inch Apple Cinema HD Display. The Radeon 9600 endows an aging Power Mac G4 with better performance, so you can play newer games, use



OpenGL applications, and see faster Core Image effects in OS X 10.4. And the 9600 won't break the bank.—PETER COHEN

\$199; ATI Technologies, www.ati.com

III HOME MUSIC SERVER

Squeezebox

While there are plenty of ways to send music from iTunes to speakers around the house, Slim Devices' products have been our favorites for several years now. The latest **SQUEEZEBOX** (4 1/2; macworld.com/0959) continues that tradition by making a good thing even better. This

year's Squeezebox improvements came in two stages: a second-generation version added support for speedier 802.11g wireless networking, a higher-quality DAC, and a bunch of other little tweaks that add up to major improvements in sound quality and stability. The third-generation version took all those features and dropped them into a gorgeous metal-and-plastic case. To top it all off, the included Slim Server software also got several big upgrades this year. Let the music play.—DAN MILLER

\$279; Slim Devices, www.slimdevices.com



BestSoftware



Adobe Creative Suite 2 Premium

||| DESIGN SUITE

Adobe Creative Suite 2 Standard

Adobe's **CREATIVE SUITE 2 STANDARD** (August 2005) gathers the usual powerhouse apps (with stellar updates to Photoshop [4½], InDesign [4½], and Illustrator [4½]) and ties them together with the new Bridge application, aptly named for its cross-application integration. Bridge not only is a smash-hit replacement for Photoshop's well-received File Browser, but also enables suitewide workflow improvements such as better automation, improved searching, and batch processing. Other improvements appear in

the apps themselves: Photoshop CS2 makes a splash with its new Vanishing Point tool, Smart Objects, improved 16-bit image support, and more; InDesign gives designers more ease of use with its Object Styles, anchored objects, XML snippets, and enhanced text- and graphics-handling functions; and Illustrator showcases new drawing tools and a new Control palette.—JACKIE DOVE
\$899; Adobe, www.adobe.com



||| TIGER SCRIPTING TOOL

Automator

Before Tiger's release, if you wanted to perform operations such as merging multiple PDFs, adding labels to multiple Finder items, scaling or rotating images, and sending birthday e-mail reminders, you had two options: do it all by hand or master AppleScript so you could build your own automated workflows. Apple's **AUTOMATOR**, built into OS X 10.4, puts AppleScripting power into the hands of users who feel weak-kneed at the thought of writing code. A few relatively simple click-and-drag operations let you build your own workflows; even better, you can turn these workflows into programs that you can easily reuse or put on a pop-up menu in the Finder. Thanks to Automator, anyone—not just programmers—can now create reusable task-automation tools.—ROB GRIFFITHS
as part of OS X 10.4, \$129; Apple, www.apple.com

||| INNOVATIVE CATALOGING APP

Delicious Library 1.5

If you have a large collection of software, video games, movies, and music, and you like having complete information about your collection at your fingertips, then **DELICIOUS LIBRARY** (4½; April 2005) is for you. This application makes it a breeze to catalog all your stuff—just point your iSight camera at the object's bar code, and Delicious Library goes to the Internet and digs up info on the product. Since Delicious Library can sync with your iPod, you can have the scoop on your collection on hand at all times. Most important, Delicious Library has a fun interface that actually makes using the program enjoyable.—ROB GRIFFITHS
\$40; Delicious Monster, www.delicious-monster.com

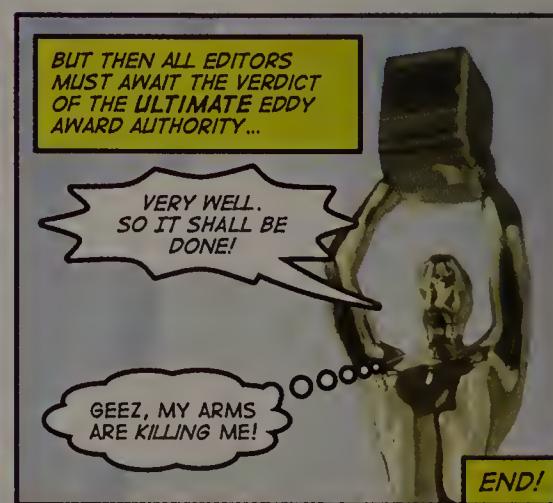
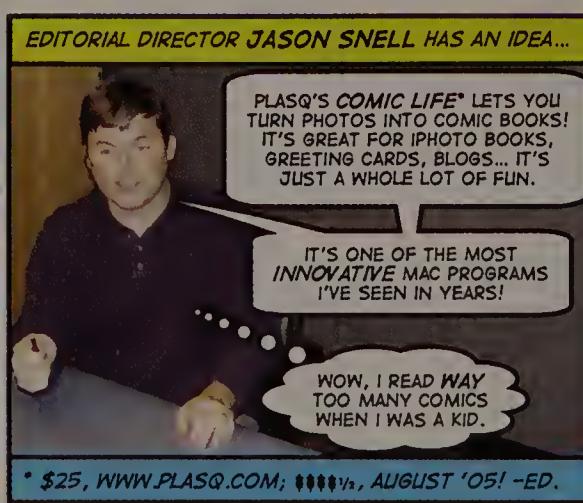


||| COMIC-STRIP CREATOR

Comic Life 1.2



AT MACWORLD'S EDDY AWARDS MEETING...





VIDEO SUITE

Final Cut Studio

Video pros love Macs, and Apple's latest version of **FINAL CUT STUDIO** (October 2005) gives those users even more reason to remain loyal. The suite contains video-editing app Final Cut Pro 5 (4½), which adds native HDV support, multicamera editing, and multichannel audio; motion-graphics program Motion 2 (4½), which adds GPU-accelerated

32-bit float rendering, MIDI behaviors, and integration with Adobe After Effects; DVD-authoring app DVD Studio Pro 4 (4½), with HD H.264 encoding and an integrated Dolby encoder; and audio tool Soundtrack Pro (4½), which includes a multitrack mixer, 50 professional plug-ins, and more than 5,000 Apple Loops. That's a lot of value packed into one \$1,299 suite.—JONATHAN SEFF

\$1,299; Apple, www.apple.com

FLEXIBLE WEB BROWSER

Firefox 1.0.7

Mozilla's **FIREFOX** (4½; November 2005) can be almost anything you want it to be. This open-source browser couples typical functions, such as pop-up blocking and tabbed browsing, with a seemingly endless supply of add-ons that extend functionality. You can control iTunes, transfer files via FTP, edit text, sync bookmarks, and check RSS feeds, all without leaving the browser window. Extensions can function entirely in tabs, in the background, or in the status bar without requiring a visit to the Dock.—CURT POFF

free; Mozilla, www.mozilla.org



PHOTO-SHARING WEB SITE

Flickr

Yahoo's **FLICKR** isn't a Mac-specific Web site. But if your Mac is full of photos, Flickr is the one place on the Internet you need to visit when it's time to share those images with the world. And the site's tagging system lets you find other people with similar passions (one reason for the site's cult following).—KELLY TURNER

free; Pro membership, \$25; Yahoo, www.flickr.com



More on Our Eddy Winners

Want to take an even more in-depth look at this year's Editors' Choice Awards selections? Here's where you'll find mouse ratings and assessments of Eddy winners reviewed by *Macworld* this year.

- > **Adobe Creative Suite 2**, macworld.com/0960
- > **Comic Life 1.2**, macworld.com/0961
- > **Delicious Library 1.5**, macworld.com/0962
- > **Digital Hotspotter**, macworld.com/0955
- > **Dreamweaver 8**, macworld.com/0936
- > **EOS Digital Rebel XT**, macworld.com/0535
- > **Final Cut Studio**, macworld.com/0700
- > **Firefox 1.0.7**, macworld.com/0963
- > **iH5**, macworld.com/0867
- > **iPhoto 5.0.4**, macworld.com/0964
- > **iPod nano**, macworld.com/0817
- > **iPod with video**, macworld.com/0957
- > **Mac mini**, macworld.com/0958
- > **Mathematica 5.2**, macworld.com/0356
- > **OmniOutliner Professional 3.0.3**, macworld.com/0612
- > **PGP Desktop Home 9.0.1**, macworld.com/0719
- > **PictureMate Deluxe Viewer Edition**, macworld.com/0653
- > **ScanSnap**, macworld.com/0956
- > **Senuti 0.29**, macworld.com/0965
- > **Squeezebox**, macworld.com/0959
- > **SuperDuper 1.5.5**, macworld.com/0966
- > **TextWrangler 2.1**, macworld.com/0378
- > **Toast 7 Titanium**, macworld.com/0856
- > **Transmit 3.2**, macworld.com/0657
- > **World of Warcraft**, macworld.com/0967

WEB-DESIGN PROGRAM

Dreamweaver 8

With **DREAMWEAVER 8** (4½; January 2006), Macromedia made a complex, well-designed application even better. The Web-design application's advanced CSS features are powerful and easy to use, and they render CSS code more accurately in the browser.

Interface improvements—such as tabbed document windows, a unified CSS styles panel, and workspace layouts—let you work more efficiently. Macromedia has also thrown in an improved FTP

engine that lets you upload files in the background, and it has added visual XSLT authoring to help you convert XML files to Web pages. With Adobe's purchase of Macromedia, this figures to be the last version of Dreamweaver released solely under the Macromedia banner. It's a fitting send-off, as well as a sign that no matter who's marketing this venerable tool, it may still have a bright future.—JACKIE DOVE

\$399; Macromedia, www.macromedia.com



BestSoftware

continued



IMAGE-STORAGE AND -EDITING APPLICATION

iPhoto 5.0.4

Previous versions of iPhoto made it easy to manage and print your digital photos. But if you wanted to do more—sharpen images, say, or adjust a photo's brightness—you had to use a separate image-editing application. With **iPHOTO 5** (4½; April 2005), Apple put a complete suite of the most common image-editing tools right at your fingertips, making it much easier to polish photos before turning them into photo books. And that's another feature that got a big update in this new version: in addition to allowing you to create hardcover books, iPhoto now supports three different book sizes, single- and double-sided pages, and soft-cover books. Add to that new organizational tools, support for Raw files, new slide-show features, and more, and it's easy to see why this is a must-have application for Mac users with digital photos to share.—KELLY TURNER

as part of iLife '05 suite, \$79; Apple, www.apple.com

PRODUCTIVITY TOOL

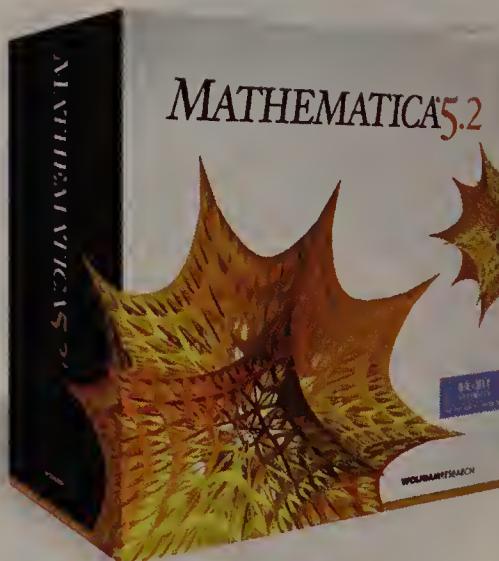
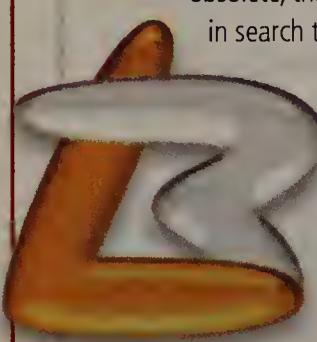
LaunchBar 4

Objective Development's **LAUNCHBAR 4** (4½; macworld.com/1010) is a utility that lets you access almost anything on your Mac by pressing a few keys. If you think Spotlight made such utilities obsolete, think again—the built-in search technology in OS X

10.4 is no match for LaunchBar when it comes to opening an application, a file whose name you already know, an Address Book contact, or a Safari favorite, or even searching

Google, the Internet Movie Database, or any other resource on the Web. If moving a mouse makes your wrists ache, LaunchBar's keyboard-oriented approach might cure what ails you: just type the first few letters of whatever you're looking for, and LaunchBar will find it. Better yet, as you continue to use it, LaunchBar learns what you're likely to look for and gets progressively better at finding it. The latest version adds a fast, multithreaded indexing engine with live index updates in the background, as well as a Smart Groups feature for grouping similar items. The forthcoming LaunchBar 4.1, currently in beta, even adds support for Spotlight searches.—JASON SNELL

home user license, \$20; Objective Development, macworld.com/0954



IMPROVED MATH PROGRAM

Mathematica 5.2

With most programs, between-version updates don't feature anything you'll want to write home about. Then again, Mathematica isn't like most programs. With a pair of "minor" updates in 2005, Wolfram Research radically improved the performance of its advanced math software by adopting both 64-bit and multiple-CPU support. The updated **MATHEMATICA 5** (4½; May 2005) is faster at solving big problems, even more sophisticated at automatic selection

of algorithms and database functions, and capable of linking automatically to Web sites. Mathematica's powerful environment can now help scientists, students, and mathematicians solve nearly any problem.—SCHOLLE SAWYER McFARLAND

\$1,880; Wolfram Research, www.wolfram.com

INDISPENSABLE RSS READER

NetNewsWire 2.0.1

Safari 2.0 brought RSS feeds to the Mac-using masses, but for serious RSS users, Ranchero Software's **NETNEWSWIRE 2** is the tool of choice. It lets you manage hundreds of RSS and Atom feeds via a Mail-like, three-pane interface. Smart folders let you create custom feed views, and a built-in tabbed Web browser means you don't have to leave NetNewsWire to visit Web sites. The utility can automatically download Podcasts, and you can even synchronize your feeds (and feed status) between multiple computers. We wouldn't be able to do our jobs without NetNewsWire.—DAN FRAKES

\$25; Ranchero Software, www.ranchero.com



VERSATILE ORGANIZER

OmniOutliner Professional 3.0.3

When it comes to programs that help you visualize, prioritize, and otherwise organize your thoughts, Mac users enjoy an embarrassment of riches. So why is it that among all the great outliners and idea organizers available, The Omni Group's **OMNIOUTLINER PROFESSIONAL 3.0** (4.5; August 2005)

is the one that's absolutely indispensable to anyone whose livelihood depends on clearly assembling and presenting his or her thoughts?

Probably because OmniOutliner is a versatile application that works well with others: you can build presentations in OmniOutliner and export them to Apple's Keynote, while a Word export feature preserves named styles whenever you move files between OmniOutliner and Microsoft Word. The latest version has even greater flexibility. It can put multimedia files directly in a document, supports inline notes, and has a new "folded" editing feature that hides parts of the outline you're not working on, for a more manageable display of information. It's great that Mac users have so many options when it comes to outliners, but as far as we're concerned, there's only one choice.—PHILIP MICHAELS

\$70; The Omni Group, www.omnigroup.com



ENCRYPTION TOOL

PGP Desktop Home 9.0.1

You can't hide from prying eyes—especially if the encryption software you're using has a clunky, hard-to-decipher interface. Enter **PGP**

DESKTOP HOME 9

(4.5; October 2005), a personal security program that delivers effortless, high-level security for ordinary human beings.

The latest version consolidates the interface into a single window, and encrypts instant-message chats as well as e-mail.—JENNIFER BERGER

\$99; PGP, www.pgp.com



iPOD RIPPING TOOL

Senuti 0.29

When it comes to iPods, people are always asking one question in particular: How do I get my music from my iPod back onto my computer? (That's because when it comes to iPod syncing, it's a one-way street.) And thanks to developer Whitney Young, we have an answer—**SENUTI** (4.5; macworld.com/0965). This clever little app is the easiest and most reliable method we've found for moving songs from an iPod to a Mac—a legitimate practice if your computer's hard drive dies and your only copy of the songs you've purchased from the iTunes Music Store happens to be on your music player (or if you're looking for a quick and easy way to copy your music library from one of your Macs to another). Just select a song or playlist and click on the Copy button; Senuti (that's *iTunes* spelled backward) copies your selection to your Mac's new drive and adds the contents to iTunes.

Any other questions?—DAN FRAKES
free; Whitney Young,
macworld.com/0952

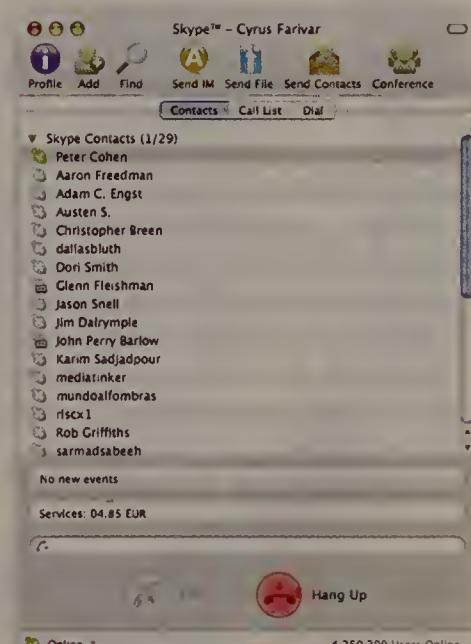


INTERNET TELEPHONY APP

Skype 1.3

When former FCC chair Michael Powell says your product will "inevitably" change the world, you're probably onto something. That's the case with **SKYPE**, software that allows regular people to call any phone in the world at ridiculously cheap rates and to call any other Skype-equipped computer for free. We use Skype to connect with far-flung folks for Macworld's Podcast interviews. You can also buy a local phone number tied to your computer, and when your friends call, your Internet-connected computer will ring—no matter where you are on the planet. If that doesn't change the world, I don't know what will.—CYRUS FARIVAR

free; Skype Technologies, www.skype.com



DISK-CLONING UTILITY

SuperDuper 1.5.5

If you value your data, you back it up. And even more useful than a simple backup is a perfect copy of a hard drive—a clone—that lets you get up and running immediately if something happens to your boot volume. Unfortunately, OS X, with its invisible files and Unix-style permissions, doesn't make creating such a copy simple. But Shirt Pocket Software's **SUPERDUPER** (4.5; macworld.com/0966) does: Just choose the volume to copy and the destination to copy to, and then click on Start. And thanks to a Smart

Update feature, you can easily update that clone with the latest changes. You can even create a Safety Clone, which is a great way to share user files when you're testing different OS versions on multiple drives or partitions. SuperDuper is an invaluable tool in any maintenance arsenal.—DAN FRAKES

\$28; Shirt Pocket Software, www.shirt-pocket.com



BestSoftware

continued

FREE TEXT EDITOR

TextWrangler 2.1

When touting the merits of Bare Bones Software's **TEXTWRANGLER** (4½; May 2005), it's easy to focus on the program's price tag, slashed from \$49 to \$0 with the release of version 2. Trouble is, the phrase "free text editor" usually conjures up images of unremarkable, interchangeable apps that are worth every penny of what they cost. That's not the case with TextWrangler, which sports some sophisticated options for handling and formatting text. Several features from Bare Bones Software's heavyweight text editor BBEdit have made their way into TextWrangler 2, including the ability to run time-saving Text Factory tasks and open multiple documents in the same window. Geekier users have something to love as well, thanks to TextWrangler 2's direct integration with Perl, Python, and Unix shell scripts. And we mentioned the low, low price, right?—PHILIP MICHAELS
free; Bare Bones Software, www.barebones.com



FEATURE-RICH BURNING APP

Toast 7 Titanium

Those of us who are serious about burning CDs and DVDs—be they data, audio, or video—will definitely appreciate the advances in **TOAST 7 TITANIUM** (4½; December 2005). Among the many features that Toast offers (and that OS X lacks) are newly added data-spanning capabilities, which solve the problem of trying to back up files, folders, or applications too big to fit on a single optical disc. Toast divvies up the items among as many discs as necessary. Version 7 also incorporates Roxio's \$50 Popcorn software—great for backing up costly DVDs—and the ability to encode DivX 6 files. Toast can author DVDs—with ten menu styles and a new MPEG-2 encoder—and has many other abilities. And Toast's support for Ogg Vorbis and FLAC audio files saves a ton of time when you're converting files for burning to CD.—JONATHAN SEFF

\$100; Roxio, www.roxio.com

Readers' Choice Awards

Macworld readers are making a habit of handing out statues to Apple. For the second consecutive year, the Readers' Choice Awards for the top hardware and software of the past 12 months, as selected by the Macworld Reader Panel and an online survey at Macworld.com, go to a pair of offerings from Cupertino.

In a very tight race, the **MAC MINI** edged out the iMac G5 with Front Row as our readers' pick for the year's top hardware release. Readers favored the slimmed-down desktop for delivering Mac capabilities at a bargain-basement price, and many of them praised the mini for extending the Mac platform to new markets.

As for 2005's best software release, readers declared this the year of the Tiger: **MAC OS X 10.4** (\$129; Apple, www.apple.com) won handily, with nearly two-thirds of the vote. Readers hailed the OS update for its innovation, citing Spotlight, Dashboard, Automator, and other

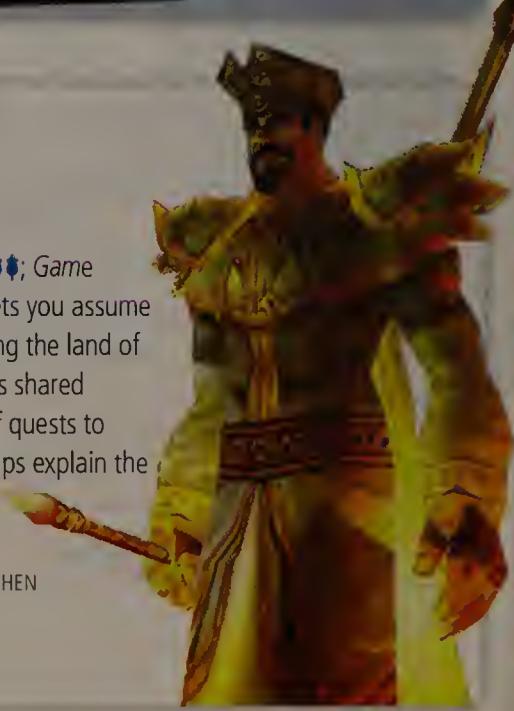


enhancements introduced in Tiger. That was enough to enable OS X 10.4 to outdistance runners-up NetNewsWire 2.0 and Transmit 3.2 as our readers' favorite software.

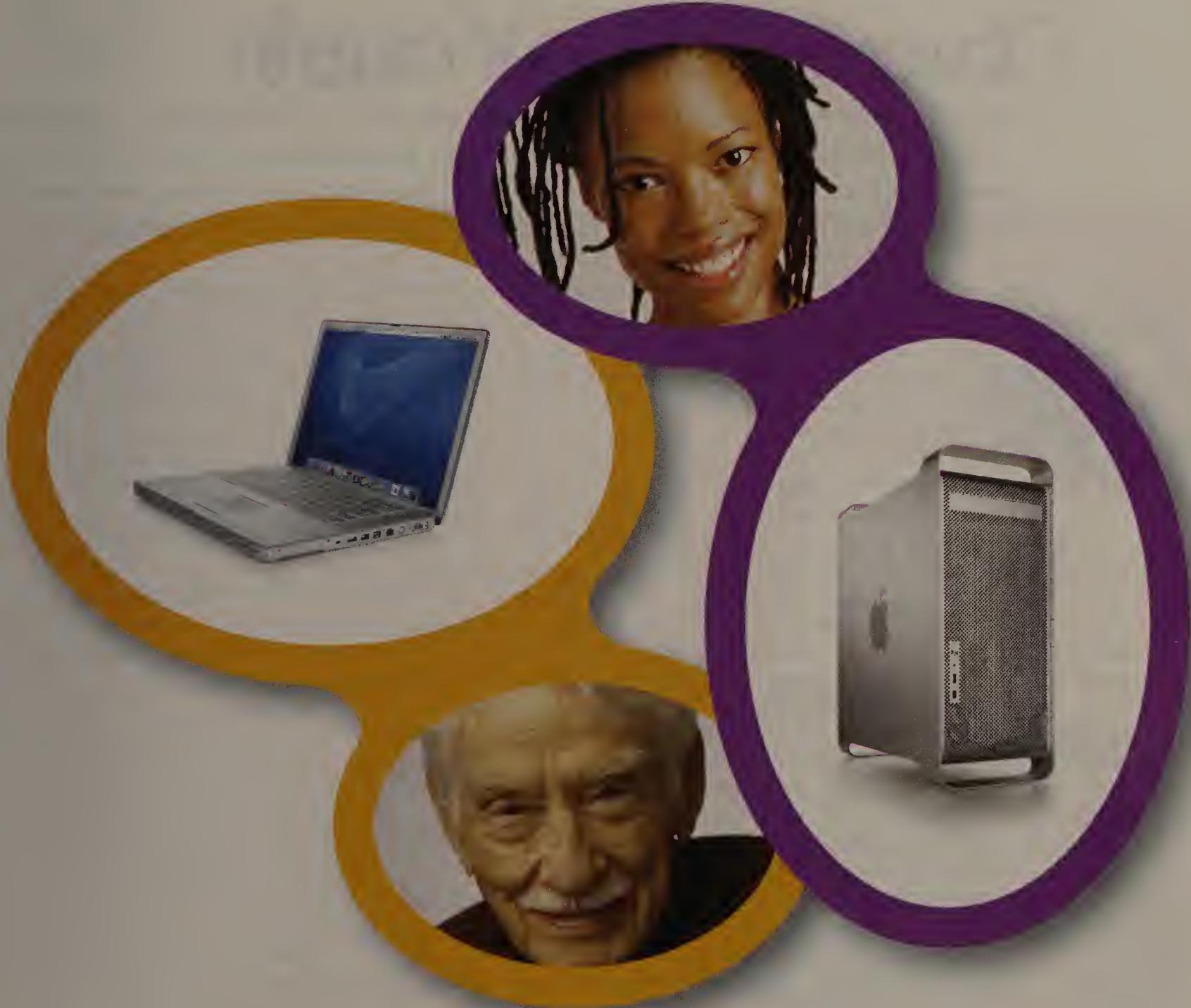
ONLINE ROLE-PLAYING GAME

World of Warcraft

Blizzard Entertainment's **WORLD OF WARCRAFT** (4½; Game Room, February 2005) is an online role-playing game that lets you assume the identity of a member of one of the many races populating the land of Azeroth, and then play with (or against) other gamers in this shared world. With a multitude of lands to explore and hundreds of quests to undertake, there's a tremendous amount to do. And that helps explain the game's popularity, even though you have to pay a monthly fee to play. What's more, Blizzard has kept the Mac and PC versions in lockstep since their late-2004 release.—PETER COHEN
\$50 plus monthly fee; Blizzard Entertainment, www.worldofwarcraft.com



Are you a **laptop person** or a **desktop person**?



Join the Macworld Reader Panel to enter our "Mac Choice Sweepstakes" where the winner gets to choose between a G5 Power Mac or a 15" PowerBook†. As a panel member you will be invited to participate in online research surveys and discussions. And panelists get a chance to win every time they participate in online surveys. Participation in the Mac Choice Sweepstakes is open to all eligible Macworld readers. Whether you're a beginner, expert, switcher, notebook or desktop user—join the Macworld Panel and let your voice be heard. *We're listening!*

To participate, please visit: www.macworld.com/surveys/joinpanel/

NO PURCHASE NECESSARY TO ENTER OR WIN. Void where prohibited by law. Drawing is open to all eligible Macworld readers who complete the survey. We must hear from you by 1/31/2006 to be included in the drawing. Winner will be notified by email approximately one week after survey close, on or about 2/7/2006. For Official Rules, please visit www.macworld.com/surveys/panel/rules.cfm. All information provided will be kept completely confidential and only used in combination with other respondents. Personal information will not be sold, shared or used in any way outside the scope of this research. For more on privacy, visit www.macworld.com/surveys/panel/privacy.htm.

†Subject to availability at time of drawing.

Macworld

Cut through the Clutter

Smart folders disguise Tiger's convenient and dynamic Spotlight searches as good old-fashioned folders. You can use a smart folder to keep track of almost anything—from all the documents you've opened this week to every Excel file you've highlighted with a red label.



Even better, smart folders give you access to hidden metadata and advanced Spotlight features, so you can find files that would elude conventional searches. Learn to set up a search string just right, and smart folders can reduce your need to organize.

Find What You Seek

To create a smart folder, choose File: Find (or press ⌘-F). In the New Search window that appears, you'll see buttons that let you choose where to search, along with pop-up menus for narrowing the search criteria. Save any search as a smart folder by clicking on the Save button. Alternatively, choose File: New Smart Folder (or press ⌘-option-N), and the New Smart Folder window appears.

By default, the Finder saves smart folders in */your user folder/Library/Saved Searches*. But you can save them on the desktop or in your user folder and then move them manually. Whenever you open a smart folder, it will display the current results of your search; the files themselves remain in their original locations.

The Perfect Query How useful your smart folders will be depends on how well you put together your search strings. Type text into the toolbar's search field, and Spotlight returns all items that include that text in their file name or content (see "Focus the Spotlight"). For example, if you'd like to create a smart folder that keeps track of every file that mentions your favorite philosopher, you can use one search term, such as *Hume*. Because the search is case-insensitive and looks for *any* word begin-

ning with the term you entered, it will also find the *anatomy* paper in which you mentioned the *humerus*.

If you enter more than one word, Spotlight treats your search as an AND search—it finds items containing all the words (or, to be precise, all the words beginning with the strings you entered) in the title or contents. You can also enclose phrases in quotation marks. Type "*AppleScript Studio*" to find items with that entire phrase in their title or other metadata (Spotlight can't find complete phrases in an item's content).

The Right Place The New Search (or New Smart Folder) window can limit a search to specific locations. Click on one of the buttons in the header (Servers, Computer, Home, and so on) to search only in that location. To limit your search to one or more particular folders or volumes, click on Others, click on the plus-sign (+) button at the bottom of the window, and then add the locations.

Search Attribute Aptitude If you're looking for something very specific, check out the search-attribute pop-up menus. These offer you much more control. Pick and choose from the pop-up menus to create additional conditions for your search—for example, Kind Is Music, Last Modified Is Within The Last 2 Weeks, or Size Is Less Than 3 MB.

Smart Ideas Here are two more ideas:

- > Create a smart folder that keeps track of all the files you've been working on recently. Set the Kind attribute to Documents and add a second condition: Last Opened Since Yesterday.

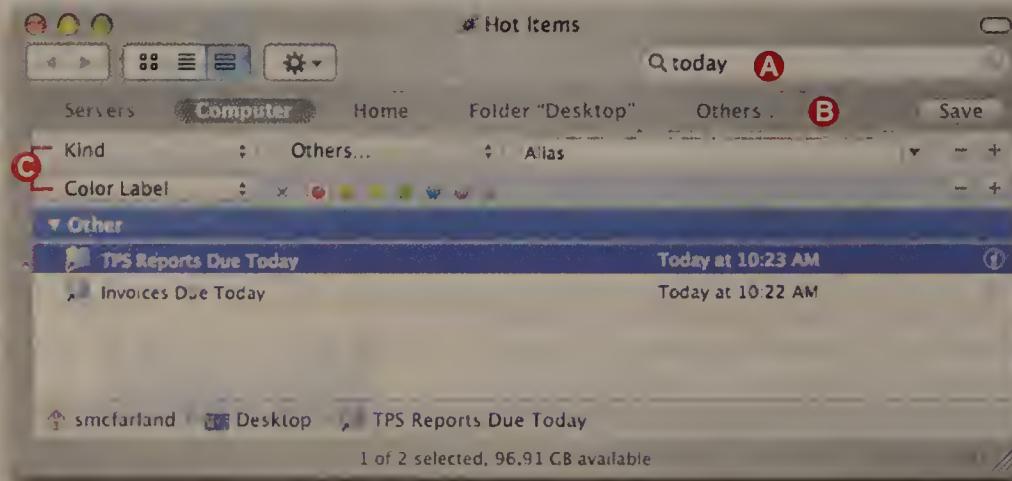
- > If you mark important files with the Finder's color labels, use the Color Label attribute to create a smart folder that displays all the files marked with, say, a red label, regardless of their location.

Explore the Other Side

Simple smart folders are powerful, but you can go further still. Choose Other from one of the pop-up attribute menus, and a window appears in which you can choose from more than 100 additional attributes. If you expect to use an attribute—Title, for example—frequently, select the Add To Favorites option to put it directly in the pop-up menus.

continues

Focus the Spotlight
The Smart Folder window displays Spotlight's current search results and has controls for further narrowing the search. Enter your search string in the text field **A**, choose where to search **B**, and pick additional search attributes from the pop-up menus **C**. OS X automatically adds smart folders to the Finder's sidebar for easy access.



Got Eye Candy for Your iPod?

*Holiday money burning a hole in your pocket?
Still have a few "thoughtful" gifts to return?
Why not show your iPod a little love?*

Ranging from the silly (candy-colored socks) to the sublime (the rockin' Bose SoundDock digital music system), iPod accessories are as hot as the iconic digital audio player. If you want to add a little bling to your music, Peachpit's got the guide that covers all that's new in iPod gear. Whether you want to hit the slopes in an iPod custom-tailored boarding jacket, girl-up your earbuds with sparkly "Shuga Buds," or sup up your car for that next road trip, *Your iPod Life* has everything you need to give your iPod style.



**Your iPod Life: A Guide to the
Best iPod Accessories from Playlist**
Dan Frakes
ISBN 0-321-39470-4, \$12.99



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You'll find detailed information about digital photographs and cameras—such as aperture, exposure time, device make and model, and whether the flash was used. The list also includes ratings (for photos in iPhoto or songs in iTunes), author and creator names, and dozens of other options.

One attribute on the Other list deserves special mention: Spotlight Comment. You can add comments to any file by selecting it in the Finder, choosing File: Get Info, and typing in the Spotlight Comments field at the top of the Info window. Search these comments using the Spotlight Comment attribute.

Smart Ideas You can construct some fantastic smart folders using attributes in the Other list.

> To keep track of project files in many locations and of many types, give them all the same Spotlight comment. Pick a unique string, such as *JoesGreatNovel*. (The prefab Automator workflow Batch Apply Spotlight Keywords can apply your keyword fast; see macworld.com/0873.) Then create a smart folder with the search condition Spotlight Comment Contains *JoesGreatNovel* (or whatever string you used). All the project's files will magically appear in the folder.

> Want a quick way to find all the nighttime shots you took with your Canon camera? Create a smart folder with these three conditions: Device Make Con-

tains Canon, Flash Yes, and Rating Greater Than 3.

> If you're trying to clean up your iTunes library, create a smart folder that displays particular musical categories: for example, all jazz tracks recorded at a low bit rate. Use these conditions: Kind Music; Musical Genre Jazz; and Audio Bit Rate Less Than 160.

Learn Spotlight's Language

Once you get excited about smart folders, you might start to chafe at their restrictions. The Other list is long, but it doesn't contain every type of metadata Spotlight can search for. The Find window itself also imposes some restrictions. For instance, using only the pop-up menus, you can't do any OR searches—say, look for JPEG or PDF files. Worst of all, unlike the searches you perform using the Spotlight menu, smart folders *exclude* Mail messages and Address Book contacts by default. (And unfortunately, Spotlight can't search messages in most other e-mail programs.)

Luckily, you can overcome most of these limitations by using an obscure item on the Other list called Raw Query. Entering a raw query is like talking directly to Spotlight in its native language. In fact, every time you create a smart folder, the Finder translates your menu choices into a raw query, which you can see in the smart folder's Get Info window.

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The Symbol Life

Raw Queries Revealed Raw queries look different from regular Spotlight searches. Instead of plain English words, such as *Name* and *Kind*, they use odd terms such as *kMDItemDisplayName* and *kMDItemKind*. (The *k* stands for *constant*, by the way, and *MD* stands for *metadata*.) The way you construct queries, however, is straightforward. Enclose each expression, or search condition, in parentheses and use the proper symbols to separate your search terms (see “The Symbol Life”).

For instance, to find either JPEG or PDF files, but no other file types, create a new smart folder, choose Other from the attribute pop-up menu, select Raw Query from the list, and click on OK. Then enter this raw query in the attribute’s text field: (*kMDItemKind == *JPEG**) || (*kMDItemKind == *PDF**).

I used an asterisk (a wild-card character) before and after each file type because Spotlight might use a longer name, like *PDF Document* or *Adobe PDF Document*, and I want to catch all the variants.

Subtle Searching To make a search term case-insensitive, for example, enclose it in quotation marks and follow it immediately (no spaces) with the letter *c* (raw queries are case-sensitive by default). You can also use *d* to ignore diacritical marks or *w* to specify that the term must be a whole word. For example, the search *kMDItemTextContents == "cafe"cd* would

match *cafe*, *Café*, and *caf *.

Smart Ideas Here are some ways you can use raw queries in your smart folders (learn more at macworld.com/0895):

> Use this query to display all five-star photos *except* those taken with your low-resolution Motorola camera phone: (*kMDItemContentTypeTree == 'public.image'*) && (*kMDItemStarRating > 4*) && (*kMDItemAcquisitionMake != *Motorola**).

> Use this to find all Mail messages or Word documents containing the phrase *Take Control* (enclose the search phrase in single quotes, because it includes a space): ((*kMDItemContentType == com.microsoft.word.doc*) || (*kMDItemContentType == com.apple.mail.emlx*)) && (*kMDItemTextContent == '*Take Control**). □

If you want your smart folder to find something very specific, you might need to use a query written in Spotlight’s native language. These raw queries use special symbols. Here are the ones you’re most likely to need.

RAW QUERY SYMBOL	ITS MEANING
&&	And
	Or
==	Is equal to
!=	Is not equal to
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to

JOE KISSELL has written numerous e-books about Mac OS X software (www.takecontrolbooks.com).

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Tackle the iTunes Music Store

Apple has scored a big hit with the iTunes Music Store (iTMS). The virtual record shop offers a vast catalog of songs at low prices and has an easy-to-use interface. But you'll find more than just music. iTunes 6 added TV shows, music videos, and short films to the mix of songs, Podcasts, audiobooks, and movie trailers. Feeling overwhelmed? Here are some tools that will help you customize your shopping experience.

Personal Service

iTunes now has several personalization options, and one of the coolest is Just For You, an early version of a feature that suggests songs and albums you might enjoy, basing its recommendations on your past purchases at the iTMS. To get customized recommendations, look to see that this option is turned on—you should see a bold Turn Just For You Off link at the bottom of the iTMS main page. (If you see a Turn Just For You On link, click on the link to do so.) Now Just For You will show up in a window above Exclusives on the iTMS home page. Click on the See All link, and you can refine the suggestions list by clicking on the Already Own It or Don't Like It button that appears under each album (see "Surprise Me"). These tools will not only help the iTMS learn your tastes, but also banish these albums or books from your recommendations list forever. The Just For You feature also works for albums that you own but that you didn't purchase through the iTMS.



Want more tips
on digital music?

For iPod- and
iTunes-related
expert advice and
breaking news,
as well as reviews
of all the latest
gadgets, check out
playlistmag.com.

Surprise Me iTunes 6 offers personalized music suggestions with the new Just For You feature.

The screenshot shows the 'Just For You' section of the iTunes Music Store. At the top, it says 'These songs and albums have been chosen just for you. Click the "Show Me More" button to see more selections'. Below this, there are four main sections: 'You bought The London Howlin' Wolf S...', 'You bought Live at Bonnaroo.', 'We also recommend: Run Your Own Race', and 'We recommend: Experience Hendrix - The Best...'. Each section includes album art, the artist's name, the title, the release date, and a price of \$9.99. Below these sections is a table of 15 recommended songs:

Name	Artist	Album	Genre	Price
1. The Lord's Prayer	4.10 Tara Park	Things Unseen	Pop	\$0.99 BUY SONG
2. American Woman	5.07 The Guess Who	American Woman	Rock	\$0.99 BUY SONG
3. Fly Me to the Moon	6.05 Diana Krall	Live in Paris	Jazz	\$0.99 BUY SONG
4. Action Man	4.30 Widespread Panic	Don't Tell the Ba	Rock	\$0.99 BUY SONG
5. In the City	2.19 The Jam	The Sound of Th	Rock	\$0.99 BUY SONG
6. You've Got to Hide Your Love	2.55 The Beach Boys	Beach Boys Part	Pop	\$0.99 BUY SONG
7. The Man in the Black Suit	3.39 Stephen King	The Man in the	Audiobooks	\$18.95 BUY AUDIOBOOK
8. I Don't Need Tim	3.20 50 Cent	The Massacre	Hip-Hop/R&B	\$0.99 BUY SONG
9. Sugar Magnolia	7.15 Grateful Dead	The Closing of	Rock	\$0.99 BUY SONG
10. Jack & Diane	4.16 John Mellencamp	Words & Music	Rock	\$0.99 BUY SONG
11. I'll Use	6.16 Ben Harper	Welcome to the	R&B/Soul	\$0.99 BUY SONG
12. Stupid Questions	4.55 Kekoa Williams	Breathe	Rock	\$0.99 BUY SONG
13. Have You Heard?	3.12 ZZ Top	Tres Hombres	Rock	\$0.99 BUY SONG
14. Silicturnirova	3.45 The Big Wu	Tracking Buffalo	Rock	\$0.99 BUY SONG
15. Fever	5.24 Plump DJs	A Plump Night Out	Dance	\$0.99 BUY SONG

Pass It Around

Sometimes songs or artists touch our lives so profoundly that we just have to share them with our friends or family. There's an easy way to do this: by clicking on the Tell A Friend link in the upper left corner of an album's page or in the upper right corner of an artist's page. Doing so brings up a window that lets you send one or more people an e-mail notification with album art and a link to that page.

But there are a few less-obvious ways to send links to your pals (especially those who don't like having their e-mail addresses revealed to Apple). Or perhaps you want an easy way to link to a new album on your blog. To get a direct link, just control-click (if you have a multibutton mouse, right-click) on the name of an album or artist in the iTMS—or to get a link to an individual song, on the arrow to the right of its title—and select the resulting Copy iTunes Music Store URL contextual-menu item. The URL is now in your Clipboard, ready to paste into a private e-mail message or add to a Web site.

Another way to share an iTMS address is to simply drag and drop a song, an album, or an artist name to the desktop (this creates a .webloc HTTP link), to the Bookmarks bar in Apple's Safari or Mozilla's Firefox (this adds the link as a bookmark), or directly into an e-mail message (this adds the URL). This trick also works with iMixes, Podcasts, audiobooks, and more. Activating any of the links I've described opens iTunes to the proper page at the iTMS.

Up for Review

If you're an armchair music critic (and really, who isn't?), share your thoughts with the world by clicking on the Write A Review link that appears on the lower right side of any album page. Add a one- to five-star rating and about 200 well-chosen words, and your cheers or jeers will show up for all the world to see. But what happens if your tastes change? That Black Eyed Peas track that seemed so catchy a month ago might drive you crazy now—and

continues



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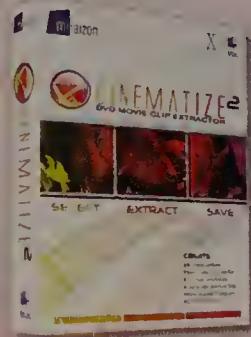
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If you're more interested in having Apple deliver information to you than you are in sending links to others, there's something for you, too: custom RSS feeds. Pay a visit to the iTunes Music Store RSS Feed Generator (macworld.com/0880); there, you can create feeds based on all types of data, such as new releases in blues and French pop, top audiobooks, or just-added jazz—you pick the genres that you care about (see "A Custom Feed"). Then click on the Generate button, and the page will present you with a feed URL that you can enter into any RSS reader—including the one built into Safari. This is a great way to

A Custom Feed Looking for an easier way to keep up with iTMS releases? Create a custom RSS feed and let Apple deliver the information to you.



In the Basket Use iTunes' Shopping Cart to collect music before you buy—and keep an eye on your spending.

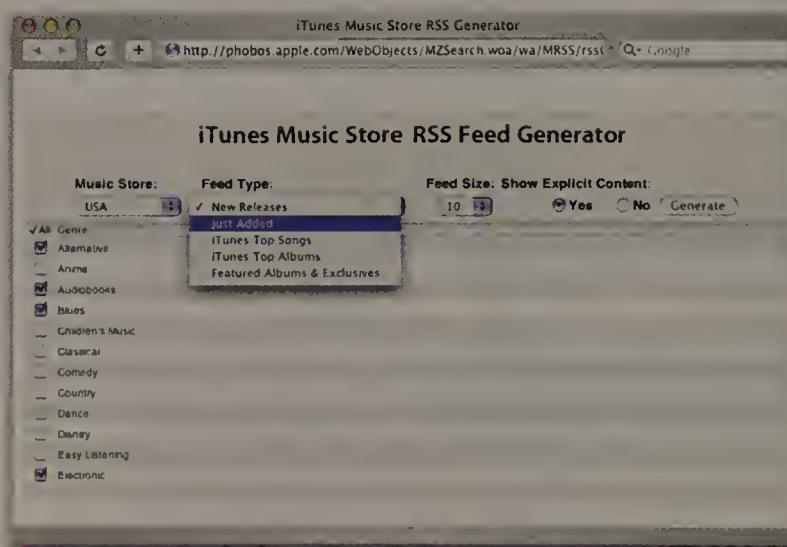
keep abreast of the iTMS goings-on that most interest you.

List It for Me

In previous versions of iTunes, playlist glut could clutter up the Source window and actually make your tunes harder to find. But since the latest versions of iTunes let you organize playlists into folders (and even subfolders), there's no reason not to go on a playlist spree, adding one for every album. In addition to placing all your iTMS purchases in the default Purchased playlist, iTunes 6 can generate playlists on a per-album basis. Just select the Automatically Create Playlists When Buying Song Collections option in the Store tab of iTunes' preference pane.

Save It for Later

If you find yourself impulsively splurging on every album that tickles your fancy, you might want a way to force yourself to ponder before you purchase. iTunes provides a financial buffer, in the form of a shopping cart—go to the Store tab of iTunes' preference pane to activate it. Select the Buy Using A Shopping Cart option and click on the OK button, and a new icon will appear in the Music Store entry in your iTunes Source list. When you find a song or



an album you might want to buy, click on the Add Song or Add Album button (which will have replaced the standard Buy Song and Buy Album buttons); that item is then added to the shopping cart instead of charged directly to your credit card. When you want to take a look at what you've added, click on the Shopping Cart icon, and you'll see a list of everything in your cart, as well as the total price of the items you've chosen (see "In the Basket"). You can then buy individual songs or albums, or the whole cart, with one click. You can remove songs (or switch back to the standard shopping method) just as easily. And as a bonus, iTunes will suggest other albums, based on the items in your cart.

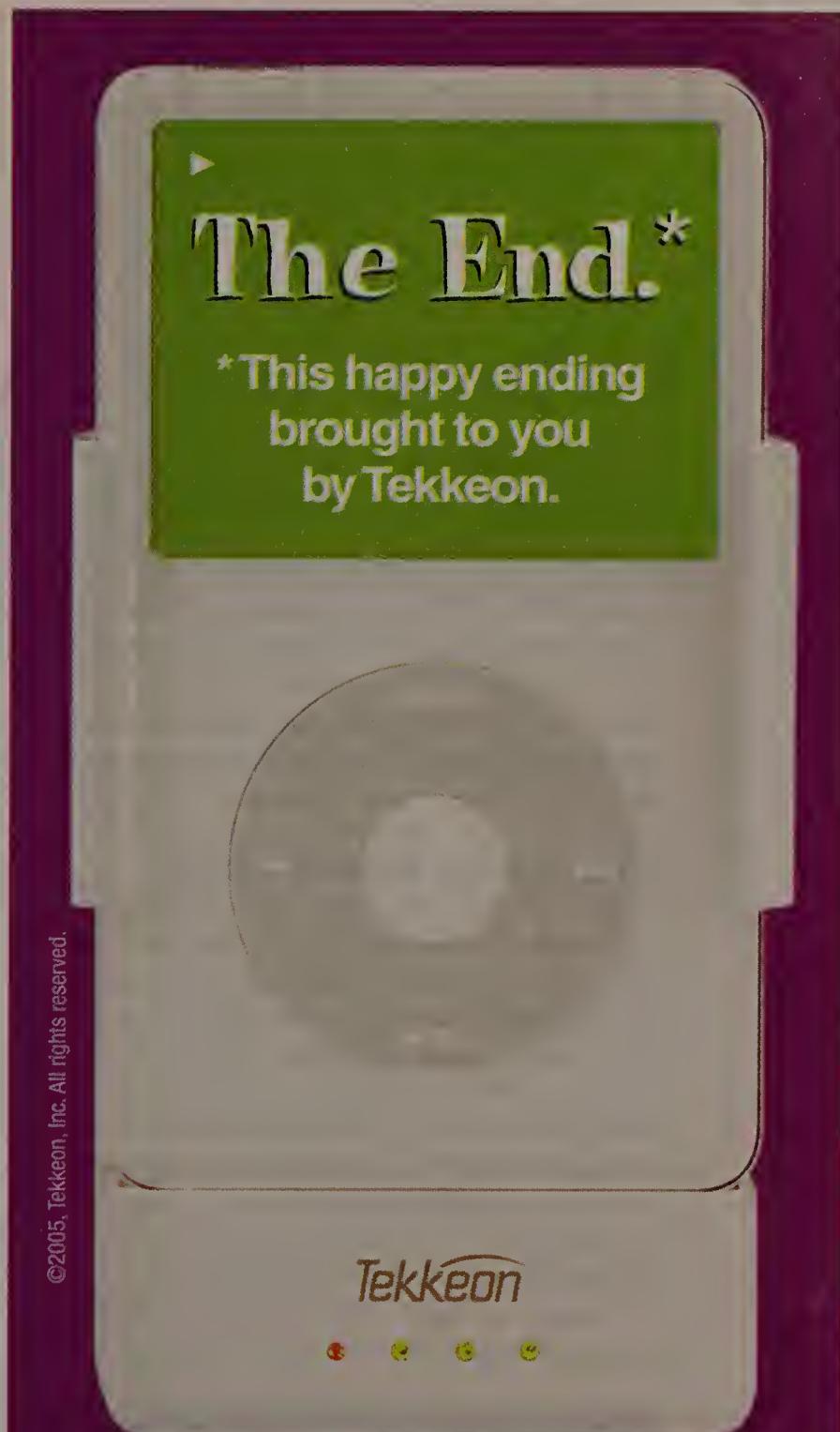
Debit Me

In case you don't like using credit cards online (or the idea of your spouse's being able to see how much you spend on music every month), iTunes now lets you pay for purchases directly from your bank account, via PayPal. Click on your account name in the upper right corner of the iTMS window, enter your password, click on the View Account button to get to your Apple Account Information page, and then click on the Edit Credit Card button. At the top of the screen, you'll see radio buttons for the four major credit cards, as well as for PayPal. Click on the PayPal icon and validate your request; then iTunes will whisk you off to the PayPal Web site, where you will verify your account.

Not So Fast

Although people who have blazing cable or DSL connections tend to take broadband for granted, much of the country is still using dial-up modems. If your poky connection causes iTunes' song previews to stutter and stop, enable the Load Complete Preview Before Playing option in the Store tab of iTunes' preference pane. This forces iTunes to load an entire preview before playing it—eliminating the stutter. □

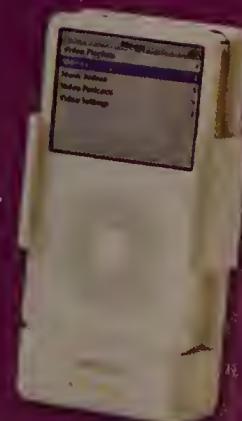
MATHEW HONAN writes about digital audio for *Wired*, *Playlistmag.com*, and other publications—all of which helps cover the enormous bill he runs up every month at the iTunes Music Store.



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Extend Your Dynamic Range

High-contrast scenes can be the bane of a photographer's existence. If you expose for the shadows, the highlights turn into supernovas. Expose for the highlights, and the shadows become black pools. Solving the problem used to require special equipment or extensive image editing. But Adobe Photoshop CS2 now makes the process easier.

It lets you quickly combine multiple exposures of the same scene—capturing the highlights *and* the shadows—into a single stunning image.

Understanding Dynamic Range

Cameras don't see the world as we do. Our eyes can pick out the shadow detail of a shaded tree trunk and the subtleties in a bright sky at the same time. A camera can't. At the root of this discrepancy is something called *dynamic range*, the ratio of the lightest point in the scene to the darkest. On a bright day, most people can easily see 50,000 subtle variations in tone. A typical 8-bit photo captured by a digital camera picks up a mere 256 variations.

Photoshop's HDR Command

To compensate for this difference in dynamic range, photographers sometimes shoot through a *graduated*

Tip

You can capture even more tonal information by shooting Raw files. When you get back to your Mac, open the files in Photoshop's Camera Raw mode; then save the images as 16-bit files. Use these converted files for the Merge To HDR command.

density filter; a piece of glass that darkens the sky (typically the brightest part of a photo), in hopes of compressing the scene's tonal values.

Graduated density filters work great when you have one bright area, such as a sky, with a clean horizontal line. But they aren't as helpful in more-complicated scenarios, such as a brightly lit window in the middle of a dark room, or a landscape with a jagged mountain range. In those cases, the better solution is to take multiple shots—for example, exposing one for the window and another for the interior—and then combine the images in Photoshop. Until recently, however, this technique required quite a bit of patience and skill.

In Photoshop CS2 (\$599; www.adobe.com), Adobe added a Merge To HDR (High Dynamic Range) command that automates the process of combining pictures with different exposures. The result is closer to what you see with your eyes (see "Beauty Is in the Details").

Beauty Is in the Details My original image (top) suffers from a limited dynamic range. Because the sky is so bright, the bushes in the foreground become nearly silhouetted. Using Photoshop CS2's Merge To HDR command, I was able to combine three different exposures into a single image (bottom). The merged image has much better shadow detail (the bushes) and highlights (the clouds).



Making the Exposures

Creating an HDR image begins at the camera. Instead of capturing just one shot of a scene, you'll need to shoot three or more frames, exposing each shot slightly differently.

For best results, use a tripod when shooting, to ensure that each frame is perfectly aligned with the next. This will make it easier for Photoshop to merge the images later. Before you begin, set your camera to shoot at the highest resolution and with the least amount of compression possible. (You want to squeeze every bit of information out of your JPEGs.) Then put your camera in Program mode, compose the scene, and lock the tripod.

To capture a simple three-frame series, use the camera's exposure-compensation control to underexpose the first shot by two stops. For the second shot, set exposure compensation to 0 (zero), which represents

your normal exposure. Finally, take the last picture at +2 exposure compensation to overexpose by two stops. You can play with this formula depending on the tonal range of the scene. For example, you may want to bracket only one stop instead of two. Or you may want to take five photos, bracketing from -2 to +2.

If you don't have your tripod handy, turn on your camera's continuous-capture mode so you can record frames in rapid succession. Then find the auto-bracketing setting and select an exposure variance, such as -1, 0, and +1, or -2, 0, and +2. Compose your scene. While keeping the camera very steady, hold down the shutter button until all three frames have fired. (This technique works only with static scenes. If you have people moving around or waves breaking, you probably won't like the results.)

Merging the Photos

Upload the pictures to your Mac. Open Photoshop CS2 and go to File: Automate: Merge To HDR. Click on the Browse button and navigate to your bracketed images. If you didn't use a tripod when shooting, select the Attempt To Automatically Align Source Images option. Then click on OK.

After processing the images, Photoshop displays a preview window of your merged image (see "All Together Now"). On the left side of the window, you'll see your source frames with their exposure values listed beneath them. On the right, there's a slider that lets you review the image's entire dynamic range. Why can't you see all the tones at once? The Merge To HDR command creates a 32-bit image—that's a lot more color information than your 8-bit monitor can display at one time. The slider lets you view this color information in degrees. However, the slider is for viewing purposes only. You're not making any changes here.

Before you move on, you need to choose a bit depth for your final image, using the drop-down menu above the histogram. I recommend selecting 16 Bit/Channel. A 16-bit image will retain more information than an 8-bit image, and it will still allow you to fine-tune the image with Levels, Curves, Color Balance, and similar controls—something you can't currently do with a 32-bit image. (Frankly, you can't do much with 32-bit images at the moment since they neither display properly on regular monitors nor print well.)

When you click on OK, Photoshop begins creating the merged file. In the HDR Conversion dialog box, you have a choice of four different conversion methods. If you're relatively new to HDR imaging, I recommend first trying the Equalize Histogram method. It attempts to automatically compress the broad dynamic range of the HDR image in a visually pleasing way. Don't worry if your picture still appears a bit flat; you'll have a chance to punch it up later.

If you want more control over the conversion process, choose Exposure And Gamma from the



Method pull-down menu. This method lets you use two adjustment sliders to fine-tune your picture. The two other methods are Highlight Compression, which focuses on compressing the highlight values in the image, and Local Adaptation, which lets you adjust your image using Toning Curve and Histogram controls. If you're comfortable setting curves, you might find the last method most useful.

When you're done, click on OK; Photoshop will do additional processing and present you with an untitled 16-bit HDR image. Save it as a Photoshop file. Now you can spruce up your picture with your favorite controls, such as Levels, Hue/Saturation, Curves, and Unsharp Mask. When you're finished, save the image again, keeping it as a Photoshop file. This becomes your "master print." If you need to use your image in screen presentations, such as a slide show or a Web page, use the Save As command to create JPEG duplicates.

Evaluating Your Work

To get a sense of the difference, compare your finished HDR image to the same scene at the normal exposure. In my photos, for example, the HDR image has better highlights in the sky and good shadow detail in the bushes. I might not have bothered to take the picture if the real scene resembled the normal exposure. □

DERRICK STORY (www.thedigitalstory.com) oversees O'Reilly's MacDevCenter.com. He's also the author of many photography books, including *Digital Photography Pocket Guide*, third edition (O'Reilly, 2005).

All Together Now
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Take Command of Color

Whether you're creating a brochure in Apple's Pages or coding Web pages in a text editor, choosing the perfect combination of colors for your design can be an intimidating process. Professional applications such as Adobe Illustrator and Photoshop have integrated color pickers that help simplify the process. But they're not your only options. Mac OS X offers color tools that can help anyone use color more effectively.

One of the most useful is the Colors panel. Once you understand its secrets, you can use the Colors panel to find inspiration, save swatches, and create custom color palettes that you can use again and again.

Gaining Access

From most Apple applications (including Keynote andTextEdit), and from many other programs that take advantage of the Colors panel, you open the panel by pressing ⌘-shift-C. Some third-party applications don't support the Colors panel, but you can easily work around this limitation—and make the panel accessible at any time—by writing a simple script.

First, open Script Editor (located in the /Applications/AppleScript folder). Type choose color in the editor, and then select File: Save As. In the dialog box that appears, set the File Format to Application, enter Choose Color in the Save As field, and then select a location for the new application. Finally, click on Save. Now whenever you want to access the Colors panel, simply double-click on the Choose Color application.

Selecting Colors

The Colors panel offers five color-selection modes, including a color wheel, sliders, and predetermined palettes. You'll see them listed in the toolbar at the



Picky, Picky Picking colors is easy with the Colors panel's color wheel. You can select from any color on your screen by clicking on the magnifying-glass icon **A**. To save a color for later use, click on the color in the color bar **B** and then drag the swatch to the grid at the bottom of the window **C**. To add more cells to the grid, drag the resize button **D** downward.

Colorful Companions

Apple's Colors panel offers five different color modes, but if that isn't enough to satisfy your eye for color, have a look at these Web resources:

ColorBlender This free online tool (www.colorblender.com) lets you select a base color; then it automatically creates a palette of six matching colors. It's a great way to get quick color inspiration.

ColourLovers This site (www.colourlovers.com) lets you peruse interesting color combinations that others post. It's a great source of color inspiration and education. You can browse, create, and rate colors and palettes.

Color Scheme Generator 2 This handy Web tool (macworld.com/0977) takes your base color and creates color schemes based on one of five color-matching methods—including Contrast, Triad, and Analogic. It also lets you preview how those colors will appear to people who have several different types of color blindness.

top of the window. If you're brainstorming colors, the color wheel is probably your best choice. Simply click anywhere in the wheel, and the selected color appears in the color bar (see "Picky, Picky").

But you're not limited to getting inspiration from the color wheel. You can sample colors from anywhere on your screen by clicking on the magnifying-glass icon (located beneath the menu bar's color-wheel icon). Your cursor will turn into a large magnifying glass with a crosshair in the center. As you

continues

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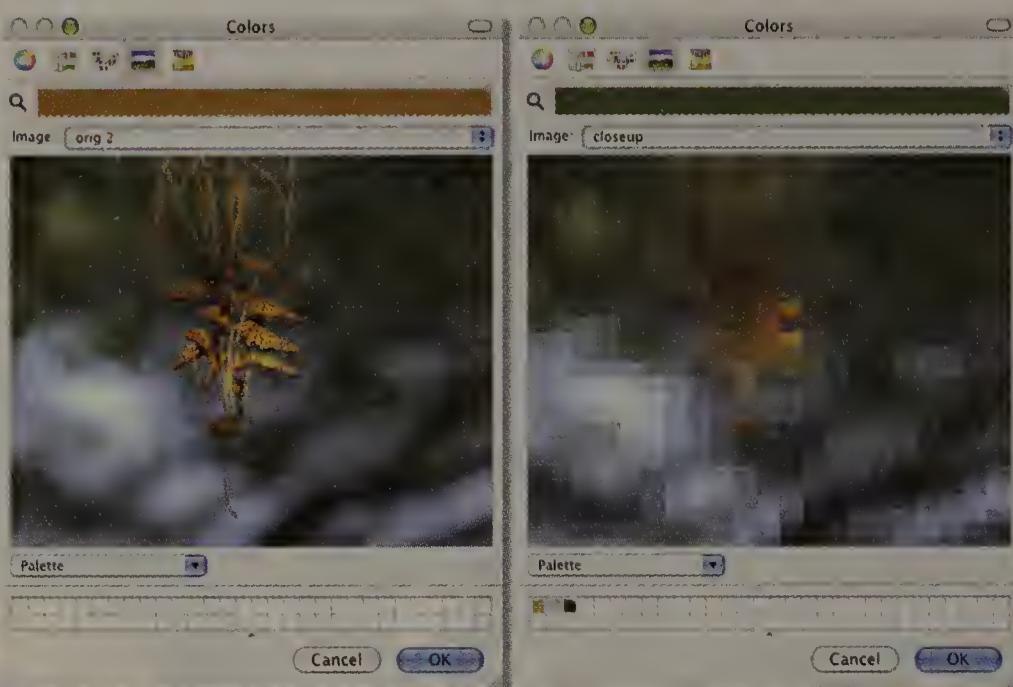
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for a more complete list of
speakers and panel topics.



A Ready-Made Color Scheme You can import a photo into the Colors panel to use it as the basis for your color palette (left). To quickly see the dominant colors in a photo, first pixelate it in an image editor (right).

drag your mouse around the screen, the pixels under the crosshair are magnified. Click on a color to add it to the panel's color bar. Your cursor will immediately return to normal.

To save a color that appears in the color bar, so you can access it again later, click on the color bar and drag the swatch to the grid at the bottom of the window. To erase a color, drag a blank cell on top of it. If you run out of space in the swatch grid, you can add more rows (up to 10) by dragging the resize button downward.

Sampling an Image for Inspiration

Perhaps you need to create a color palette that complements a photograph you plan to use on the cover of a brochure. The Colors panel makes this easy.

First, switch to the Image Palettes window (it's the fourth icon in the toolbar). Here you'll see colors arranged in a spectrum. To use a photo as your color source, open the Palette pop-up menu and select New From File. Navigate to the photo you want to use, and click on Open. (If you have an image open in another program, such as Preview or iPhoto, you can copy the photo by pressing $\text{⌘}-\text{C}$. Then switch to the Colors panel and choose New From Pasteboard in the Palette menu.) The image then appears in place of the color spectrum.

You can add as many images as you'd like to the Image Palette. To access previously imported images, open the Image pull-down menu and select the name of the file. If your image has an obscure name—such as Img_0161—you can quickly give it a more memorable name. Select the imported file from the Image pull-down menu, and then choose Rename from the Palette menu.

Tip At first glance, it may look as though Microsoft Word doesn't support OS X's Colors panel. But it does. In Word's Formatting palette, choose More Colors from any Color pop-up menu (for instance, under Font, Borders, or Shading). Word will then open the Colors panel and give you access to any custom color palettes you've created.

Once you've imported an image, you can use the cursor to sample colors, just as you would in the color wheel. Drag the colors you like to the swatches grid.

Instant Color Scheme Need a quick way to find the dominant colors in a photograph? If you have Adobe Photoshop or Photoshop Elements, open the file in the program and select Filters: Pixelate: Mosaic. Adjust the Cell Size setting until the image is reduced to just a few colors.

Don't have Photoshop? If you've installed Tiger's Developer tools (found on the Mac OS X 10.4 installation disc), you can do the same thing in Core Image Fun House (see "Tiger's Secret Tools," *Geek Factor*, September 2005). To open the program, go to /Developer/Applications/Graphics Tools. Select the image you want to sample. Add a Stylize: Pixelate effect and adjust the Scale slider to limit the colors. When you're done, save the pixelated image and import it into the Colors panel's Image Palettes window (see "A Ready-Made Color Scheme").

Saving a Custom Color Palette

Once you've found a color scheme you like, why not save it so you can use it again and again—or perhaps even share it with coworkers?

Build Your Palette In the Colors panel, switch to the Color Palettes window (the third item in the toolbar). Open the List pull-down menu to see a list of the default color palettes. These include the traditional Apple list, a palette designed for software developers who want to match the OS X color scheme, and a list of Web-safe colors.

To create your own palette, select New from the List menu. A new list entry, Unnamed1, will appear. To give it a more meaningful name, select Rename from the List pull-down menu, enter a new name, and click on Rename.

You're now ready to build your palette. If you've saved colors as swatches, simply drag the swatches from the swatch grid into the palette list. You can also use the magnification tool to select any color on your screen, and then drag the color from the color bar into the palette list.

You can rename any color in the palette by selecting it and choosing Rename from the Color pull-down menu. For example, if you plan to use one color for all of your headlines, you might rename it Headline.

Share It Tiger saves your custom color palette in the */your user folder/Library/Colors* folder as a .clr file. You can send this file to other Mac users to let them access your color palette—for example, if you're all working on the same project. They just need to drag the file into the same location on their Macs.

ROBERT ELLIS is a freelance writer, a Mac fanatic, and an avid digital photographer. He publishes a blog at www.futuroosity.com.

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Automator for Travelers

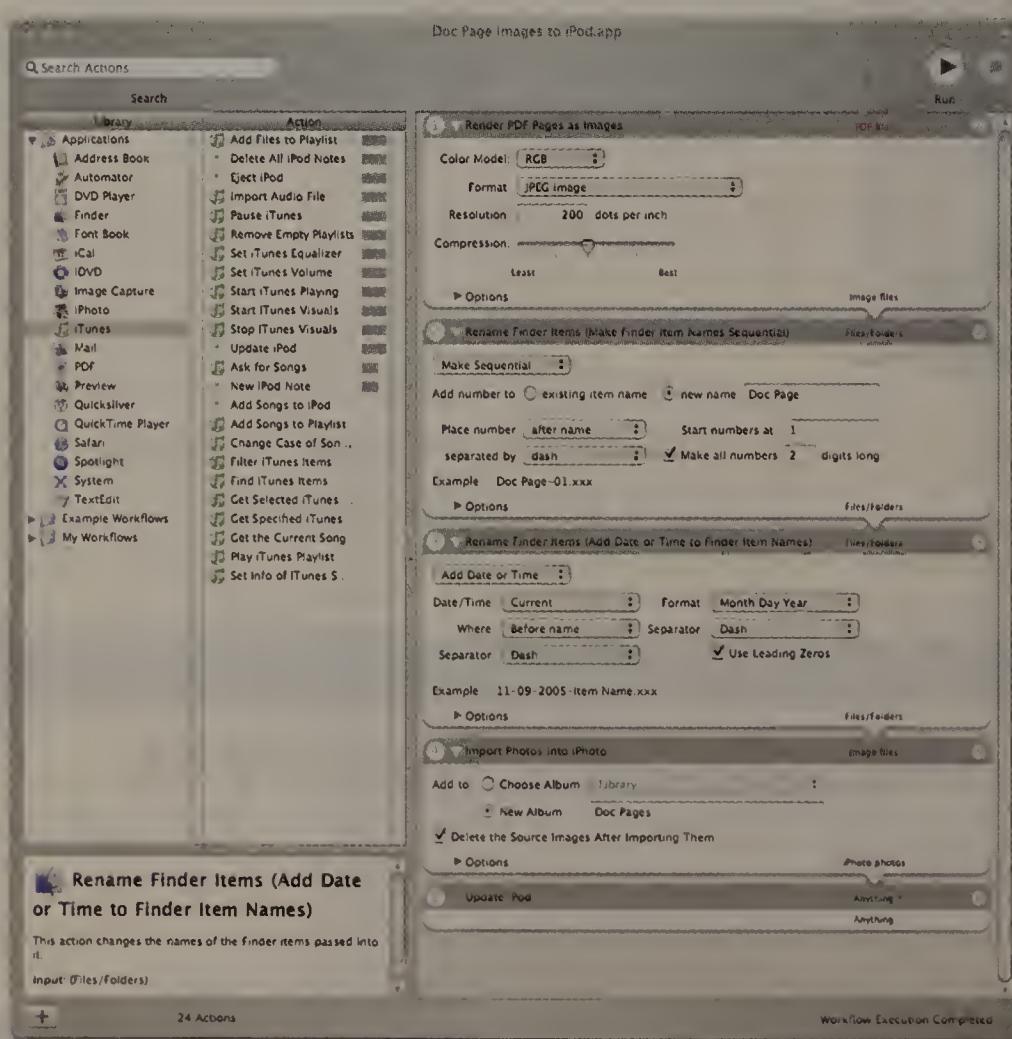
Travel has a way of magnifying even the smallest mistakes. Forget that little VGA adapter, and your entire presentation could be sunk. Forget that extra battery, and your laptop could poop out at the least opportune time. The fewer details you have to remember (or, as the case may be, forget) before, during, and after your trip, the better off you'll be.

This is why Automator, Tiger's new automation tool, can be such a valuable traveler's aid. It can help you take care of all sorts of little travel-related chores. Here are a couple of Automator workflows that take advantage of the iPod to help mobile Mac users. They're also examples of the kinds of things Automator can do, so feel free to mix and match them and experiment further.

Copy Documents to Your iPod

PDFs on Your iPod
This workflow lets you save PDFs as images and then loads those images on your iPod for easy carrying and later viewing.

It's every traveler's nightmare: losing your laptop. You can alleviate that anxiety a bit by saving backup copies of your most important documents (Keynote presentations, Google maps of your itinerary, and so on) on your iPod. The bonus is that you can also review those documents without firing up your laptop (as long as your documents are legible on the iPod's screen).



To create the workflow, open Automator and then assemble the actions indicated in the order given. (If, for example, a step starts with "PDF: Render PDF Pages As Images," find the PDF library of actions in Automator's leftmost pane. Then find the Render PDF Pages As Images action in the middle pane and drag it over to the right.) Configure each action as specified.

1. PDF: Render PDF Pages As Images This action takes PDF files as input (you'll specify which ones later) and extracts their pages as image files. The default settings (for Color Model, Format, Resolution, and Compression) should work fine.

2. Finder: Rename Finder Items This action renames the image files that are created by the previous action, and adds a unique numeric suffix to each new name. When the warning box pops up, click on Don't Add. In the topmost pop-up menu, select Make Sequential. Select New Name and enter a name—I used Doc Page—in the text field. Leave the Place Number menu set to After Name and the Start Numbers At setting at 1, and make sure Separated By is set to Dash. Then set the Make All Numbers box to 2 Digits Long.

3. Finder: Rename Finder Items Now you're going to append the current date to the front of each image's new name. Again, click on Don't Add in the warning box. Select Add Date Or Time from the first pop-up menu, and set the Date/Time pop-up to Current, the Where pop-up to Before Name, and the two Separator pop-ups to Dash. Specify whatever you want for Format, and select the Use Leading Zeros option.

4. iPhoto: Import Photos Into iPhoto Your workflow is now going to import the images you've created and named in the previous three actions into an iPhoto album. Select New Album and enter a name—I used Doc Pages—in the text field. A new album will be created only if there isn't already one with that name. Then select the Delete The Source Images After Importing Them option.

5. iTunes: Update iPod This action tells iTunes to update the connected iPod. You'll get a warning to that effect; just click on Continue.

continues

Intego VirusBarrier X4

The acclaimed antivirus program for the Mac

Multi-function Orb

The change in color of the Orb indicates the presence of an infected or damaged file.

Selection

Choose the data to be scanned in the dialog box with a simple click.

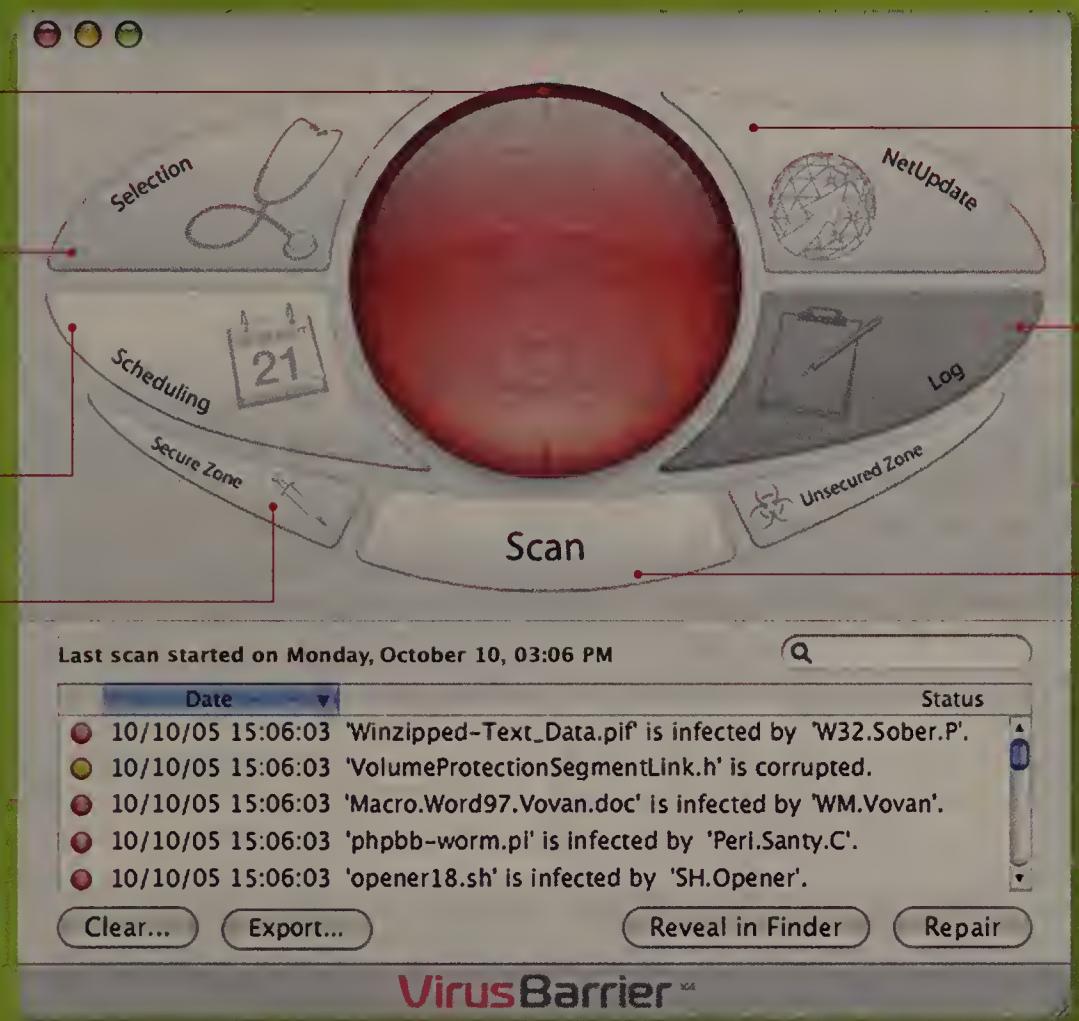
Scheduling

Schedule regular or specific scans of your volumes and view them in Apple's iCal.

Reinforced security zone

Decide for yourself the best level of security for your files and folders.

**NEW
VERSION**



NetUpdate X4

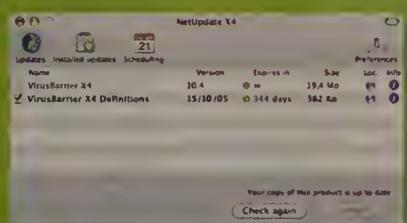
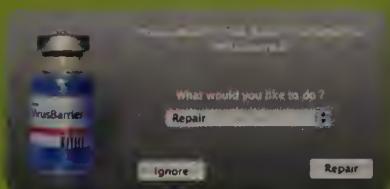
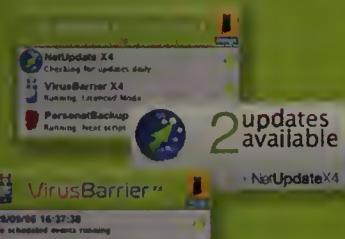
Automatically or manually check the availability of updates or virus definitions.

Complete log

Display all analysis logs of your volumes and files with a single click.

Analysis

Turbo Mode technology analyzes your data up to 40 times faster.



Intego Widgets

Discover, under Tiger, new Intego Widgets informing you of the status of your protection, the availability of updates, and scheduled events.



Repairs your Infected documents

VirusBarrier X4 alerts you to the presence of viruses and repairs damaged or corrupted files.

Your updates with NetUpdate X4

Easily schedule, check and install new virus definitions and updates for all Intego software installed on your Mac.

Main features of VirusBarrier X4

- Detects and eliminates all known viruses
- Repairs infected files
- Turbo Mode technology (up to 40 times faster)
- Simple, effective and non-intrusive
- New dynamic resizable interface
- Scans incoming and outgoing e-mail
- New Intego menu
- VirusBarrier X4 Widget and Intego Widget
- Scheduled scans
- Detailed log
- Reinforced security zone
- Heuristic and behavioral analysis
- Blocks virus execution
- New multi-function Orb
- New alert management
- File analysis by the Intego Virus Monitoring Center
- File creation and modification detection
- Temporary antivirus deactivation
- Easy integration with other Intego programs
- Management of compressed files
- Contextual Menu
- Updates via NetUpdate X4



Apple Store

MacMall

NAVARRÉ
CORPORATION

Fry's

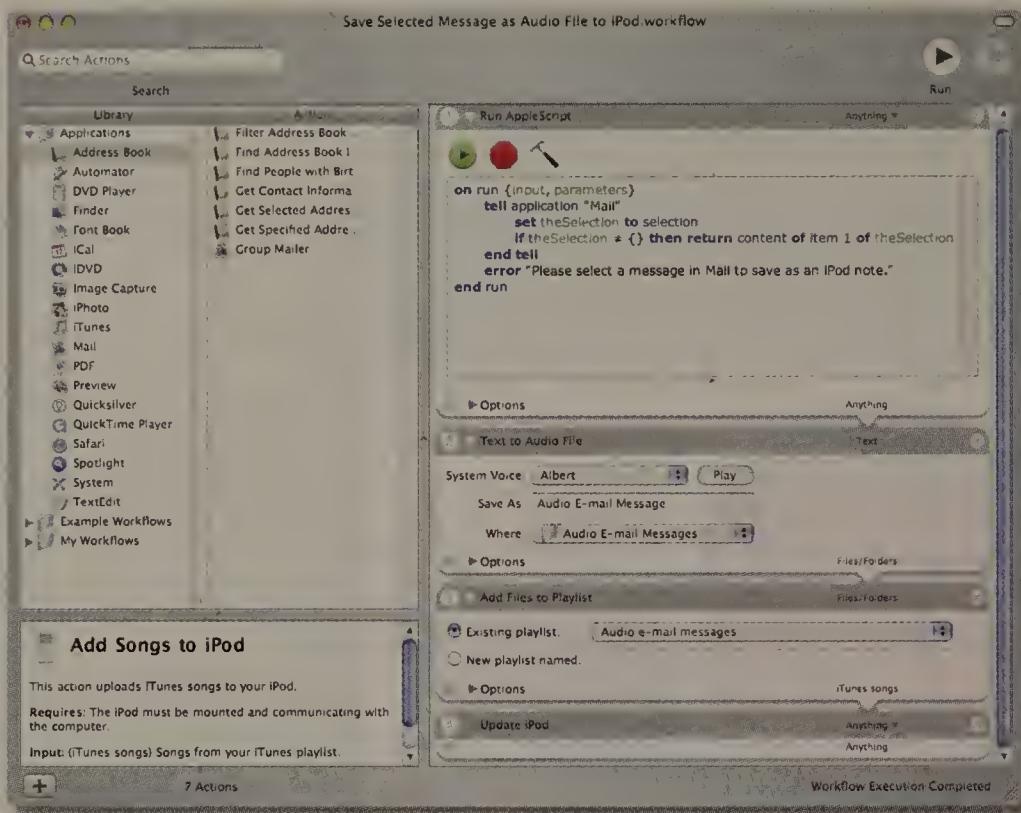
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E-mail Out Loud

Convert selected e-mail messages to audio files with this workflow, which also uploads them to a special playlist on your iPod.

Running the Workflow Before you run this workflow, make sure you've configured iTunes to automatically synchronize photos from iPhoto albums: in the iPod tab of the iTunes preference pane, select Photos, select the Synchronize Photos From option, and choose iPhoto. Select the Copy Selected Albums Only option, and then choose Doc Pages (or whatever you called your album) from the list below.

As noted in the first action, you must tell this workflow which PDF files you want saved as images. You could save this workflow to your desktop, find each PDF you want converted in the Finder, and drop it onto the workflow. But there's an easier way: save the workflow as a printing plug-in, which will make it an option in any application's Print dialog box.

To do this, select Save As Plug-In from the File menu in Automator. Next, select Print Workflow from the Plug-in For pop-up menu, and enter a name. (I used Doc Page Images to iPod.) Click on the Save button to complete the process.

Once you've saved the workflow as a plug-in, you can trigger it in any application by selecting Print from the File menu, clicking on the PDF button at the bottom of the Print dialog box, and then locating and selecting your workflow. The document will be saved as a PDF file, and that PDF will be sent to the workflow as input.

Listen to Your E-mail

You can't always sit down and read your e-mail if you're on the run; however, you can *listen* to your messages, by first converting them to audio and then saving that audio on your iPod. Here's a workflow that will do just that.

Before You Start You'll need to create a folder to hold your e-mail messages; I put a folder named Audio E-mail Messages on my desktop. Next, you'll need to create a playlist in iTunes to hold the audio version of those messages; I named that Audio e-mail messages. Then you'll need to plug in your iPod and configure it to include the playlist you just

created when it gets updated (by either selecting Automatically Update All Songs And Playlists in the iPod tab of the iTunes preference pane, or selecting Automatically Update Selected Playlists Only and choosing the playlist you just made).

1. Automator: Run AppleScript Automator doesn't include an action for retrieving the contents of an e-mail message. But since Apple's Mail is scriptable and there's an Automator action that triggers AppleScript code, it's doable. After you've dragged the Run AppleScript action into Automator's Workflow pane, replace the default AppleScript code in it with the following:

```
on run {input, parameters}
tell application "Mail"
set theSelection to selection
if theSelection ≠ {} then return content of item 1 of theSelection
end tell
error "Please select a message in Mail to save as an iPod note."
end run
```

2. TextEdit: Text To Audio File This saves the e-mail text as an audio file in a specified folder. Choose a system voice (if you want), and enter a name—say, Audio E-mail Message—into the Save As field. In the Where pop-up menu, select Other; then, when prompted, select the folder you created before building the workflow (Audio E-mail Messages, in this case).

3. iTunes: Add Files To Playlist This adds the audio file you just generated to a specified playlist in iTunes. Select Existing Playlist; then choose the playlist you created (Audio e-mail messages, in my example) from the pop-up menu.

4. iTunes: Update iPod This action adds that playlist to your iPod. Just click on Continue when the warning box pops up.

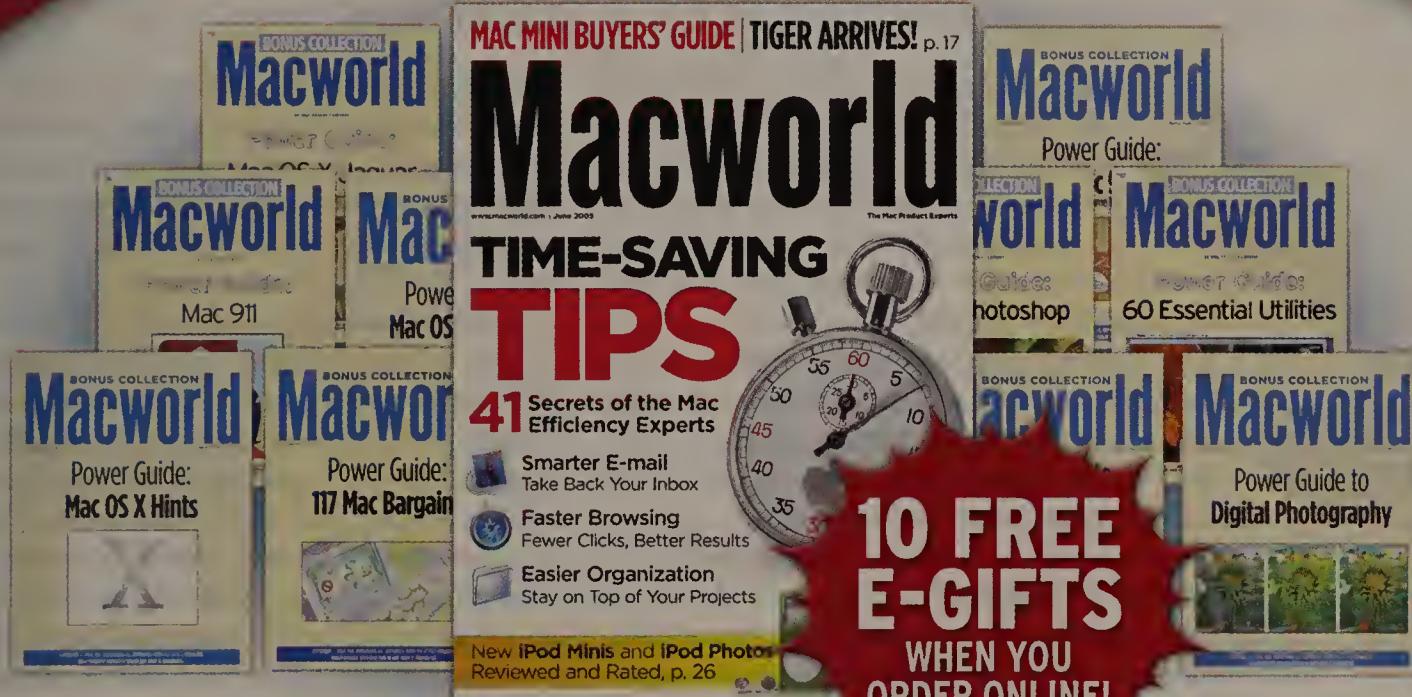
Running the Workflow Once your workflow is complete, you could trigger it from within Automator. However, you might want a way to trigger it quickly from within Mail. To do this, save the workflow as a plug-in for OS X's Script menu. Select Save As Plug-In from the File menu in Automator. Next, select Script Menu from the Plug-in For pop-up menu, and enter a name—Save Selected Message as Audio File to iPod, for example. Click on the Save button to complete the process.

Once you've saved the workflow as a Script menu plug-in, you should see a script icon in your menu bar. To trigger the workflow, bring Mail to the front, select a message, and then choose the workflow from the Script menu.

BEN WALDIE is the author of *Mac OS X Technology Guide to Automator* (Spiderworks, 2005) and the president of Automated Workflows, a company offering AppleScript, Automator, and workflow-automation consulting to Mac-based businesses.

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Launch Your Mac

One of Tiger's unsung additions is a new Unix utility, launchd, that can automatically run anything—including applications, AppleScripts, shell scripts, and Automator workflows. Use it to launch a program at startup or login, on a fixed or repeating schedule, when a file changes, or when you add a new file to a folder. It can even start a program in response to network access on a certain port.



Launchd improves system performance by limiting the number of background processes that must run all the time. It also makes automation easier; this single tool replaces numerous launch utilities, including cron, rc, and watchdog. I'll walk you through the process of creating two example launchd jobs: a simple daily backup, and a job that moves files from your Drop Box folder to your desktop. If you get hooked, you can learn more about launchd at macworld.com/0982.

Get Ready for Takeoff

To create a launchd job, you create a preference (.plist) file listing what you want to launch, as well as when and how. Then you put the file in one of several folders. The folder you choose determines when the job loads and whether it runs as the root user or as another user.

When you're creating the job, save yourself some grief by using Peter Borg's free Lingon (macworld.com/0979). This utility writes the XML code and gives you an easy way to perform steps that would otherwise require a trip to Terminal.

When you open Lingon, you'll see five tabs across the program window. These represent the different folders where you can store launchd jobs.

> My Agents The jobs listed in this pane live in */your user folder/Library/LaunchAgents*. They load when you log in. Use this location for any job that should affect only files within your user folder, or that should run only when you're logged in.

> Users Agents Jobs listed in this pane are stored in */Library/LaunchAgents*. They load when *any* user logs in, and run as that user. This would be useful when you want a background program to run for all a machine's users but don't want to put it in each user's Login Items list.

> Users Daemons Jobs listed in this pane reside in */Library/LaunchDaemons*. They load when your Mac starts up and they run as the root user. This is useful for jobs that need to run regardless of which user (if any) is logged in, or for jobs that perform actions requiring an administrator password.

> System Agents and System Daemons Jobs listed here are stored in */System/Library/LaunchAgents* and */System/Library/LaunchDaemons*, respectively. Like jobs in the Users Daemons pane, they load at startup and run as the root user, but because they're inside the System folder, you should not modify them. You may, however, find it instructive to *look* at the System Daemons list, which contains all of Tiger's preinstalled launchd jobs. Many of these formerly used cron. (See macworld.com/0980 for more about cron.)

Create a Backup Job

Say you want to create a job that backs up a Mac's Users folder every day. You could use Automator and iCal, but the workflow would skip files not owned by the user currently logged in. Using launchd, you can copy data for all users at the same time and schedule the backup to occur no matter which user (if any) is logged in.

To begin, open Lingon. Click on the New button in the toolbar and select Users Daemons in the sheet that appears. Click on Create, and then enter your administrator password. You'll enter the rest of your settings in the sheet that appears.

Name That Job Click on the Basic tab and enter a name in the Label field. This name must be unique on this computer or the job won't load. Apple recommends this naming pattern: *com.macworld.DailyBackup*. The first two parts of the name should look like a backward domain name. (You can use your actual domain name, make one up, or use *com.your_short_user_name*; this convention simply makes sure that two people

Troubleshoot Your Job

Code is picky, picky, picky! A stray space, incorrect capitalization, or a typo can sink your job. If a launchd job doesn't work correctly, click on Unload to turn it off. Double-check your script (if there is one) by running it manually in Terminal. Then compare your job's .plist contents, in Lingon's Expert pane, with the screenshots at macworld.com/0983. If everything matches, go to the Basic pane, ensure that the Disabled option is not selected, and click on Just Save. Click on Reload to reload the job.

don't come up with the same name.) Lingon automatically adds the *.plist* extension when it saves the file.

Pick Your Target Click on the plus-sign (+) button next to the ProgramArguments field and enter the full path for the program you want to launch. In this example, you're going to run a Unix command. These often use *flags* to set options and *arguments* to specify which files or folders to act on. When typing them into Lingon, you must enter each of these items (normally separated by spaces) on a separate line (see "Opening Arguments").

The command you want to run is `rsync -aE /Users /Volumes/Backup/`. This copies the entire contents of the Users folder to a volume named Backup—perhaps an external FireWire drive.

The rsync program is located in the `/usr/bin` directory, so after you click on the plus-sign button, double-click in the text field and type `/usr/bin/rsync`. Next, click on the plus-sign button again and enter the flags `-aE` (a for archive mode and E for extended attributes, such as resource forks) on the second line.

The argument `/Users`, which specifies which folder to copy, goes on its own line, as does `/Volumes/Backup/`, which tells rsync where to copy the files. (On your Mac, fill in the name of an external hard drive, or type the path to another location.)

Note that for a launchd job that launches a regular application instead of a Unix command, you need the path not just to the application, but to the file that contains the executable code inside its package. For example, the path for iTunes would be `/Applications/iTunes.app/Contents/MacOS/iTunes`.

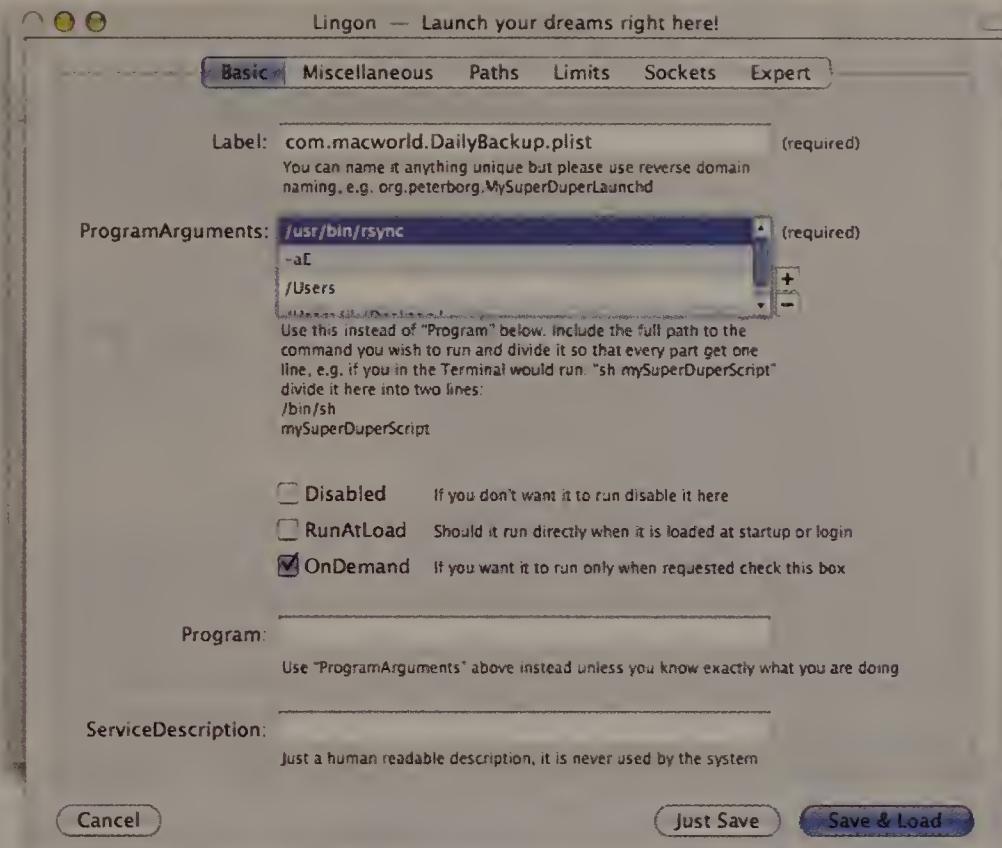
Make It Run You've indicated what will launch; the next (and trickiest) step is to define when it will launch. Lingon offers many options (see "Launch Time" at macworld.com/0981 for details). For this example, select just two.

In the Basic pane, select the OnDemand option. Leave the other options here deselected. (If you selected the RunAtLoad option, your job would run immediately; in this case, you want to specify a time.)

Click on the Miscellaneous tab. In the StartCalendarInterval text fields, type 1 in the Hour field (and leave the other fields blank) to run this job every day at 1 a.m. Enter a different time—using a 24-hour clock, in which hour 0 (zero) is midnight—if your Mac is normally turned off or asleep at that time.

Load It Up Click on the Save & Load button to save your launchd job and load it into memory. (If you click on the Just Save button, your job will load automatically on your next restart or login.)

To temporarily disable a loaded job, click on the correct folder tab (for example, My Agents), find the job, and click on the Unload button. To load it again, click on Load. To disable a job permanently without deleting it, click on Edit, click on the Basic tab, and then choose the Disabled option.



Spring-Load Your Drop Box

Now that you have a feel for how to create launchd jobs, let's try something different: a job that instantly moves anything placed in your Drop Box folder (`/your user folder/Public/Drop Box`) to your desktop. That way, when another user on your network sends you a file, you won't have to dig for it.

First, use your favorite text editor—for example, Bare Bones Software's free TextWrangler (www.barebones.com)—to create a simple script:

```
#!/bin/bash  
mv ~/Public/Drop\ Box/* ~/Desktop/
```

Name the script DropBox and save it (or download it from macworld.com/0984). Open Terminal (/Applications/Utilities), type the command `chmod u+x` followed by a space, and drag the file to the prompt to enter its path and name. Press return.

Open Lingon. Follow the same procedure as for the backup job, with a few modifications. Instead of selecting Users Daemons when you create the job, select My Agents so it will run only when you're logged in. Click on the Basic tab and type a name—for example, `com.macworld.DropBox`—in the Label text field.

Still in the Basic tab, click on the plus-sign button next to ProgramArguments. Double-click on the first line of the text field; then drag your DropBox script file from the Finder onto the first line of the ProgramArguments field to enter its name and path. Select the OnDemand option.

Click on the Paths tab. Click on the plus-sign button next to WatchPaths, double-click in the field, and enter `/Users/your user folder/Public/Drop Box`.

Click on Save & Load. To test the job, move any file into your Drop Box folder. The file should immediately disappear—and reappear on your desktop.

Opening Arguments

The free Lingon utility makes creating a launchd job much easier. Enter the path of the program you want to run and any arguments in the ProgramArguments section. Each argument or flag goes on a separate line.

Mac OS X Hints

The Insiders' Tips You Won't Get from Apple

Stop the Vibrating Alarm Clock

Apple's iCal program can alert you to upcoming events in many ways. If you choose Message or Message With Sound from the Alarm pop-up menu, for instance, the iCal Dock icon bounces, a sound plays (optionally), and the small alarm-clock icon in the alert box vibrates to catch your eye.

These alarms provide a good reminder of upcoming deadlines, but the buzzing and bouncing may soon start to wear on your nerves. To stop both, you can close the alert box—but if

you do that, you may forget all about the message it was trying to deliver. If you want to stop the buzzing and bouncing *and* keep the alert on your screen, just control-click on the clock itself and then select Stop from the pop-up menu that appears (see "Buzz Off!").

Create Burn Folders Anywhere

Tiger's new burn folders mean the end of lengthy file duplication when you want to burn a CD-R. Simply create a new burn folder (in the Finder, choose File: New Burn Folder) and drag all the items into it that you want to put on the CD-R. OS X creates aliases of your files here, and waits until you click on Burn before it copies anything.

The process is fast, but it's not perfect—what if you *already* have a folder full of stuff, ready to burn? Here's how to create an Automator workflow that turns any folder into a burn folder with just a couple of clicks.

Start by launching Automator (/Applications). Click on the Finder entry in the Library column. In the Action column, click on Get Selected Finder Items and then drag this action into the workflow pane on the right. Next, click on Automator in the Library column. In the Action column, click on Run Shell Script and drag it into the workflow, below the previous action.

Click on the Shell pop-up menu, choose /bin/bash, and set the Pass Input pop-up menu to As Arguments. This will ensure that the shell script you're about to create runs correctly.

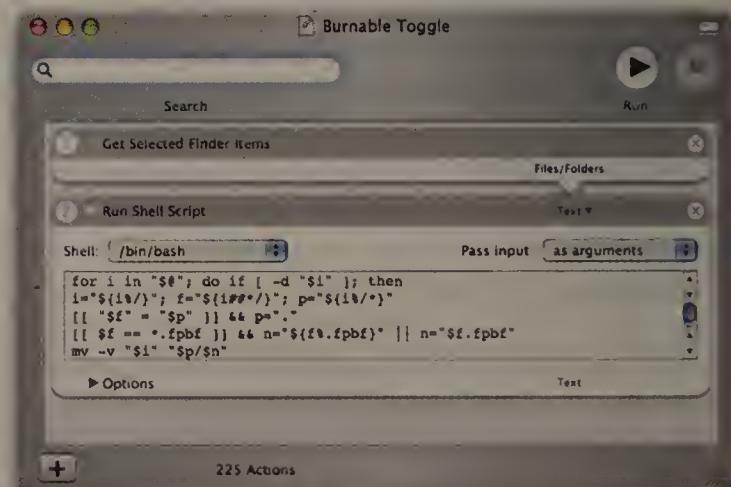
Now click in the action's text field (the spot that currently reads `for f in "$@"` and so on). Erase

all the text that's there. In its place, type the following shell script, written by Alex Nicksay (I strongly recommend copying and pasting it from macworld.com/0969):

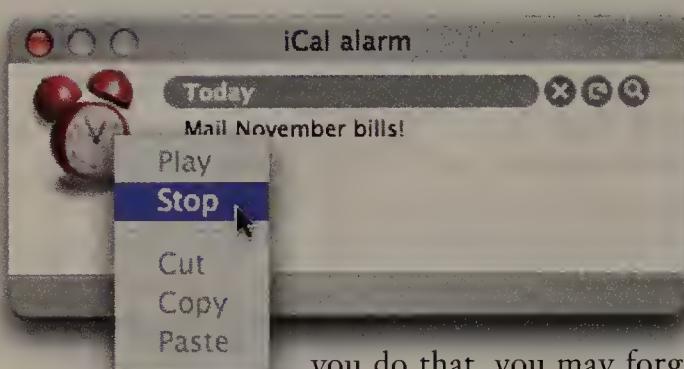
```
for i in "$@"; do if [ -d "$i" ]; then
    i="${i%/}"; f="${i##*/}"; p="${i%/*}"
    [[ "$f" = "$p" ]] && p="."
    [[ $f == *.fpbf ]] && n="${f%.fpbf}" ||
    n="$f.fpbf"
    mv -v "$i" "$p/$n"
    fi; done
```

Basically, the script looks at the Finder selection and determines whether the selected folders are currently burn folders. Whatever their current status, the script reverses those settings—a burn folder becomes a regular folder and vice versa. When you've got the script all set up, your workflow is complete (see "Feel the Burn").

Test the workflow *before* you use it on a real folder. Leave Automator open and switch to the Finder. Make a new folder, and then select it by clicking on it. Switch back to Automator and click on the Run button. When the workflow completes, you should hear a noise, and the lower right corner of the window should give you a message that says, "Workflow Execution Completed." The folder you created should now be emblazoned with the Burn icon. Select the folder once more, switch back to Automator, and run the workflow again. This time, your test folder should return to normal. If that's not what happens, you've miss-typed the script.



Feel the Burn This Automator workflow lets you turn any folder into a burn folder with a couple of mouse clicks. (Only part of the shell script appears here. Go to macworld.com/0969 to copy and paste the complete script into your own workflow.)



Buzz Off! If you like using iCal's pop-up reminders but hate the buzzing alarm clock, a simple control-click can solve the problem.



UNIX TIP OF THE MONTH

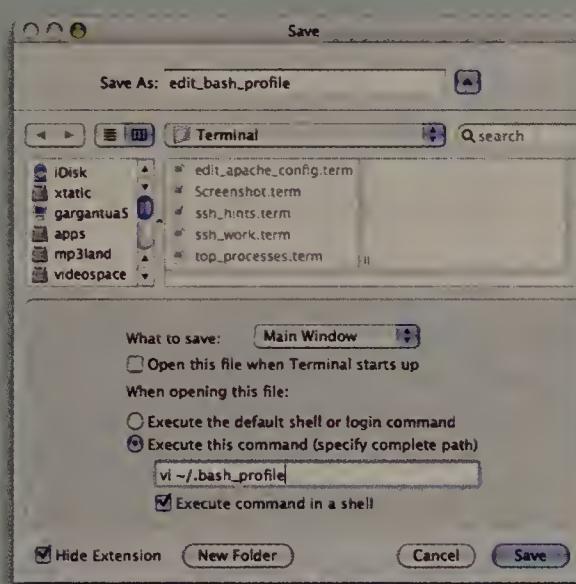
Customize Terminal Window Commands

If you often use Terminal to perform a task, such as connecting to another computer via Secure Shell (SSH), you could save yourself a lot of time by harnessing Terminal's ability to create saved sessions—in other words, saved Terminal commands. These sessions can have a completely customized look and can run any command. Activate them from the Finder or from within Terminal.

To create a saved session, open a new Terminal window, and then choose Terminal: Window Settings. This opens Terminal Inspector. Use its pop-up menu to access the different options for customizing the current window's appearance. (Warning: At the bottom of each of Terminal Inspector's panels, you'll see the Use Settings As Defaults button. *Don't click on it!* You don't want to make these tweaked settings standard for all new windows—you want them to apply to just the saved session you're creating.)

Change Your Fonts Choose Display from Terminal Inspector's pop-up menu and click on the Set Font button to change the font and the type size for your Terminal session. For the `top` command, for instance, you might use a smaller font, since you don't really need to read every line closely.

Color Your Windows Choose Color from the pop-up menu to change your customized window's color scheme. For instance, if you use SSH to connect to remote hosts, it could be useful to make those windows a different color than your local ones—set host1 to have a blue background,



Terminal Autopilot Create easy-to-use Terminal sessions that handle repetitive tasks. Here's one that edits my `.bash_profile` file.

host2 to have a red background, and so on. In this way, you can easily identify remotely connected Terminal windows. You can pick from a number of color combinations (such as white text on a blue background) by clicking on the Standard Color Collections pop-up menu.

Size It Right Use the Window section to make the Terminal window a specific size (or resize it via the drag handles). Use a smaller window, say, for a session that runs the `top` command, since its display is relatively narrow. In the Title text field, type a title—for example, `Remote to Host1` for an SSH connection.

Get Quick Access Once you have everything set up, select File: Save As. In the Save dialog box that appears, give the session a name and leave the What To Save pop-up menu set to the default Main Window. Next, select the Execute This Command (Specify

Complete Path) option. In the text field, enter the command you'd like to run in your saved session, and make sure the Execute Command In A Shell option is selected (see "Terminal Autopilot").

If you're using Tiger, you can now access your saved session from Terminal's File: Library menu. If you're using Panther, you don't automatically get access to this menu, but you can set it up yourself. Go to macworld.com/0970 to read a longer version of this tip that shows how to do that, as well as how to access saved sessions from the Finder.

Once everything works, you're ready to turn your workflow into an easy-to-use contextual-menu item. Switch back to Automator and select File: Save As Plug-In. In the Save Plug-in As sheet, give your new workflow a meaningful name—for example, Toggle Burn Folder. Make sure the Plug-in For pop-up menu says Finder, and then click on Save.

Making burn folders is now as easy as clicking on any folder (or folders) in the Finder, control-clicking, and selecting Automator: Toggle Burn Folder (or whatever you named the workflow) from the contextual menu.

Silence the Volume-Changing Beep

You're probably quite familiar with the beep your Mac makes whenever you change its volume via the keyboard. This audio feedback can be useful at times, but I usually find it annoying. It can be especially bothersome if you're trying to work quietly (in Microsoft Word, say) in an environment such as a library or a red-eye flight.

Thankfully, the solution is very simple. To silence the volume-changing beep, hold down the shift key while pressing the volume-up or volume-down key. (This doesn't work when you use your mouse to select the volume menu on the right side of your menu bar.) If you're using an iBook or a

PowerBook, and you've set the Keyboard & Mouse preference pane to require the fn key in addition to the volume-changing key, don't worry: adding the shift key still silences the beep and doesn't require too much in the way of finger gymnastics.

Trash Mail Messages via the Dock

If you use Mail, you probably know a few ways to delete a message. I can think of a few—with the message selected, press the delete key, click on the Delete button in the toolbar, or drag the message to the Trash folder in Mail's sidebar. Since I prefer to use the keyboard for most things, I usually press delete.

If you prefer the mouse, or just happen to have your hand on it, you can also drag the message to the Dock's Trash. If your Trash is empty when you do this, it won't change to display the Full Trash icon—messages deleted in this manner actually move to Mail's Trash folder.

This trick works in some other applications, too, including Apple's iTunes and Safari (in Bookmarks view) and Panic's FTP program Transmit.



Have a hint? Go to the Mac OS X Hints Web site (www.macosxhints.com) to share it. This column was based on tips from Ben Goren, Alex Nicksay, Simon Percivall, and anonymous contributors. Each month, the author of our favorite tip receives the Help Desk mug.

Senior Editor ROB GRIFFITHS is the author of *Mac OS X Power Hound, Panther Edition* (O'Reilly, 2004), and runs the Mac OS X Hints Web site (www.macosxhints.com).

Mac 911

Solutions to Your Most Vexing Mac Problems

Cursing the Cursor

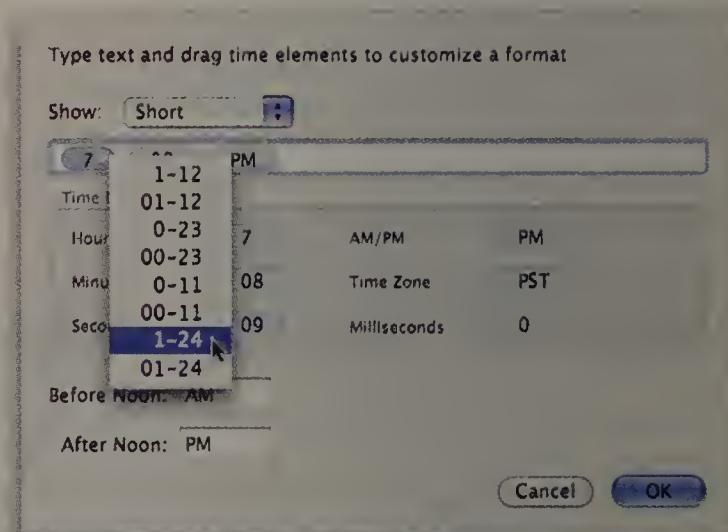
I just purchased my first Mac after using Windows for many years. I would like to replace my arrow cursor with something bigger and perhaps with a different picture. How do I do this?

Joe Robertson

Joe, better that I break it to you than a passing stranger in a Wi-Fi coffee shop: most Mac users would no more replace Apple's elegant black arrow cursor with some pixelated sparkler than we would slap rouge and lipstick on the Venus de Milo.

But *que será, será*. You can change your Mac's cursor with the help of Unsanity's Mighty Mouse (\$10; macworld.com/0900). This *baxie*, or small bit of code written to tweak OS X, allows you to customize the Mac's built-in cursors, turning your wait cursor into a wiggling mermaid or a purple bouncing alien, for instance. Mighty Mouse lets you choose additional cursor images from sites such as ResExcellence (resexcellence.com/cursors). You can even import cursors designed for Windows XP (macworld.com/0901).

If, after reflection, all you want is a big cursor, change it by going to the Universal Access preference pane, clicking on Mouse, and adjusting the Cursor Size slider.



On the Clock Give an American Mac a 24-hour clock by using the International preference pane's Customize option.

Mail Time

How do I make Apple's Mail display a 24-hour format for messages that appear in my inbox?

Brian Shin

You can make this happen through System Preferences. Open the International preference pane, click on the Formats tab, and click on the Customize button next to Times. In the resulting sheet, select Short from the Show pop-up menu. Click on the hour numeral in the text field below to reveal a pop-up menu that begins with 1-12 (see "On the Clock"). Choose 1-24 and click on OK. You've now created a Custom region. When you next open Mail, you'll find that message times are in the 24-hour format.

Maintenance Must-Haves

After many years of using Symantec's Norton Utilities, I've got to find another diagnostic tool for Tiger. The company's Web site says that Norton Utilities for Macintosh 8.0.3 is the last version Symantec will release, and that it will not revise the suite for OS X 10.4. What other application has features most like Norton's?

Dave Brady

There are a variety of diagnostic and repair tools for the Mac, including OS X's First Aid (part of Disk Utility in /Applications/Utilities), Alsoft's \$80 DiskWarrior 3 (4 stars; macworld.com/0755), Micromat's \$98 TechTool Pro 4.0.1 (4 stars; macworld.com/0755), and Prosoft Engineering's \$99 Drive Genius 1.0.1 (4 stars; macworld.com/0756). DiskWarrior is com-



TIP OF THE MONTH

Bring Bookmarks over to Firefox



Your review of Web browsers (November 2005) firmly convinced me to switch from Microsoft's Internet Explorer to Mozilla's Firefox. However, the Import wizard in Firefox 1.0.7 will not import bookmarks from Internet Explorer. I finally found a quick way to do this crucial task.

Choose Bookmarks: Manage Bookmarks, and then choose File: Import. Make sure that the From File option is enabled, click on Next, and in the resulting Import Bookmark File window, navigate to the Explorer folder (/your user folder/Library/Preferences/Explorer). Select the Favorites.html file and click on Open to import the bookmarks.

Henry Francis

You can also use this technique to import your Explorer History file as bookmarks. Simply choose History.html rather than Favorites.html in the Import Bookmark File window.—Ed.

pletely unlike Norton Utilities, but that's not a bad thing. TechTool Pro and Drive Genius offer features similar to some of Norton's components. The comparison shakes out this way:

Disk Utility's First Aid is free, and free is good. You can boot from your Mac OS X installation disc and run Disk Utility to try to repair your startup drive. Doing so isn't always effective, but it can't hurt.

DiskWarrior does one thing, but that thing is crucial: the program repairs low-level hard-drive corruption with a skill no other utility can match. Every Mac user should have a copy of it. TechTool Pro, on the other hand, performs many services. It tests your Mac's hardware components—RAM, processor, and FireWire and USB ports, for example. It also performs many of the tasks Norton Utilities does—repairing corrupt volumes, protecting files from accidental deletion, and recovering data if the drive goes kablooy.

Drive Genius also performs a variety of chores, many of which focus on disk functions. For instance, you can use it to optimize your drive, much as you could do with Norton's Speed Disk. You can use it to expand or shrink disk partitions without reformatting your hard drive. Drive Genius will also clone volumes and check the integrity of your hard drive. As for Norton Utilities-style repair, in addition to repairing permissions, Drive Genius will attempt to rebuild one of a volume database's trickier objects, the Catalog B-tree (something Norton never did well). And like Norton, Drive Genius allows you to edit data sectors, something other utilities won't do.

I wish I could say "Get this one and you're done," but I'd be doing you a disservice if I did. All of these utilities have something to offer. If I had to prioritize their helpfulness, I would recommend DiskWarrior for its one really good trick, Drive Genius for its all-around drive-maintenance and data-repair goodness, and finally TechTool Pro for its repair and data-recovery charms.

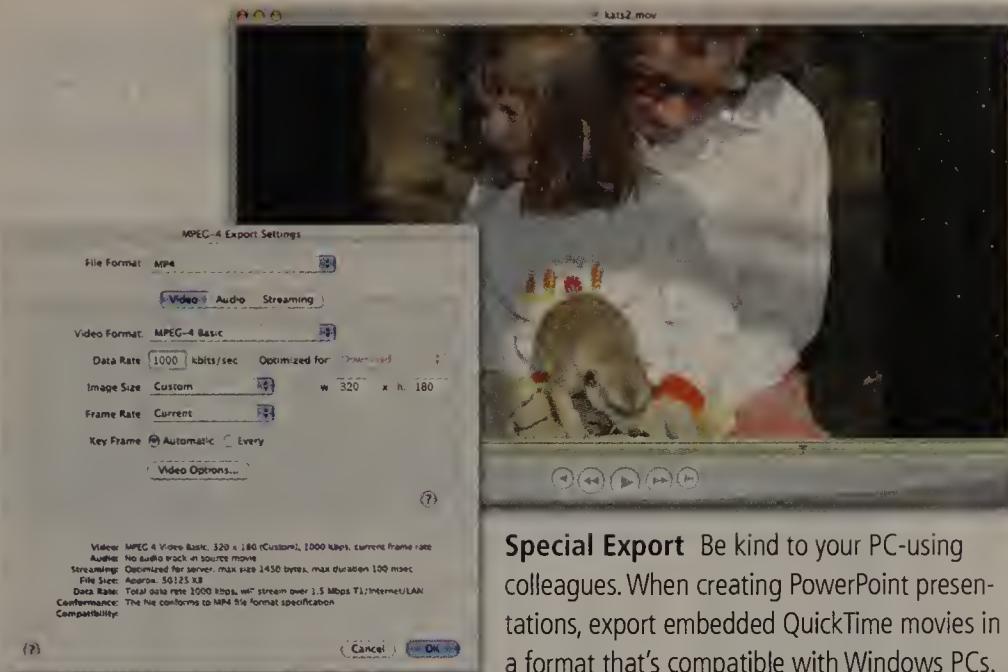
Making Your (Power)Point

I need to create a Microsoft PowerPoint presentation that includes QuickTime videos for someone who uses Windows. More than one person will use the presentation, so I don't want to assume they all have QuickTime Player for Windows. What's the best way to handle this?

Jan Bobbett

Wonderful as Apple's QuickTime is, it's not on every Windows PC. To make sure Windows users get the most from your presentations, convert your QuickTime movies to either AVI or MPEG-4 format—both of which will play within a PowerPoint presentation on a Windows computer. Then embed those movies in your presentations.

To convert the movie files, open them in QuickTime Player Pro (\$30; macworld.com/0758) and choose File: Export. In the resulting Save Exported



Special Export Be kind to your PC-using colleagues. When creating PowerPoint presentations, export embedded QuickTime movies in a format that's compatible with Windows PCs.

File As dialog box, choose either Movie To AVI or Movie To MPEG-4 from the Export pop-up menu.

Movies exported at the default AVI export setting don't look all that great. To improve their appearance (although you'll also increase their file size in the process), click on the Options button in the Save Exported File As dialog box, and then click on the Setting button in the Video portion of the AVI Settings window that appears. In the resulting Compression Settings window, move the Quality slider up to High or Best.

If you're using MPEG-4 instead and are unhappy with the look of the default export, click on the Options button in the same Save Exported File As dialog box. In the MPEG-4 Export Settings window, make these changes: choose MP4 from the File Format pop-up menu, and select MPEG-4 Basic from the Video Format pop-up menu (see "Special Export"). If the movie's frame is too large to fit your presentation, use a smaller image size when you export the movie—change it from 640 by 480 to 320 by 240 for standard QuickTime movies, for example, or to 320 by 180 if it's a DV movie (DV movies have a different aspect ratio). Doing so will reduce not only the movie's dimensions but also the amount of storage it requires (thus making your PowerPoint package a little more easily transportable). Set the Frame Rate pop-up menu to Current and the Key Frame option to Automatic.

By default, the Data Rate field is set to 64 Kbps, which is really low if you want to maintain the quality of the original video. You may need to play with settings in this field to get it right. I've found that a setting of 1,000 Kbps or higher gives me quality that closely matches the original movie's. I wouldn't use such a high rate if I were streaming video across the Internet, because all but the fastest connections would choke, but for a PowerPoint presentation on a hard drive, it's fine.

Offline Site Seeing

Is there an easy way for me to download an entire Web site so that I can view its contents even when my Mac is not

continues



Send your tips to mac911@macworld.com. If we publish yours, you'll receive this dandy mug. All published submissions become the sole property of Macworld.



TOOLS OF THE TRADE

Ready for the Worst

One day, you just might waltz up to your computer, press the power switch, and stare in dumb horror as your Mac displays a flashing folder, offers a plain blue screen, or does little more than whir. It makes sense, then, to have a troubleshooting drive at the ready that can help you repair your ailing machine.

> Your System Discs The good news is that you already have an emergency boot disc: the Mac OS X CD or DVD that you bought or that came with your Mac. Insert one of these and hold down the C key at startup to make your Mac boot off the disc. Then use the disc's copy of Disk Utility. (If you're using the Tiger installation disc, choose Utilities: Disk Utility and then click on the First Aid tab when Disk Utility launches.)

> Commercial Troubleshooting Utilities If you own a utility such as DiskWarrior, TechTool Pro, or Drive Genius, these also come on bootable discs. Use them as you would your system disc.

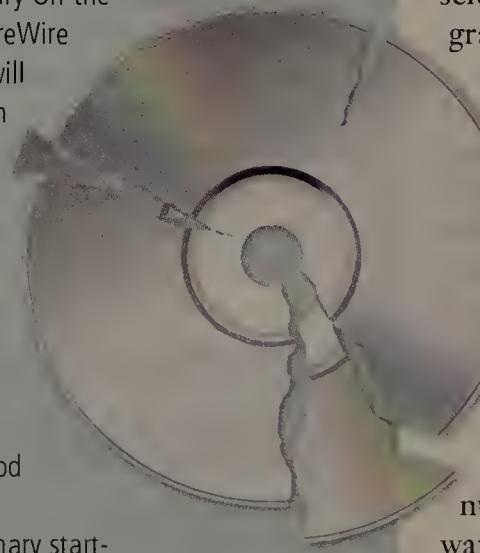
> FireWire Drive You can create a bootable troubleshooting device that, because it can hold multiple repair utilities, exceeds the capabilities of an OS X installation disc. For instance, if you have a FireWire hard drive, it can probably do the job. (Not all FireWire drives can boot OS X; see our review of FireWire hard drives at macworld.com/0923.)

If the drive has enough capacity, duplicate your Mac's current startup drive using Mike Bombich's Carbon Copy Cloner (\$5; macworld.com/0905). Any troubleshooting or repair utilities you have on your startup drive will work from the FireWire drive. On the other hand, you can create a fresh emergency drive by installing a clean copy of Mac OS on the FireWire drive and then installing your troubleshooting or repair utilities on it.

When choosing an emergency FireWire drive, consider one that you can easily slip into a pocket or pack in a computer case—for instance, LaCie's \$240 Mobile Hard Drive or Other World Computing's \$250 Mercury On-the-Go (both ; see our latest review of portable FireWire drives at macworld.com/0924). Such a small drive will prove a useful companion both in your office and on the road.

> Older iPod Do you have an older iPod (first through fourth generation)? It can also boot a Mac when attached to that Mac's FireWire port. (Sorry, current iPod models can't.) If the iPod has about 5GB to spare, you can install a bootable version of Tiger on it, as well as your troubleshooting utilities. This is a very handy way to lighten your carry-on bag when traveling: all you need is your iPod for both tunes and emergency protection.

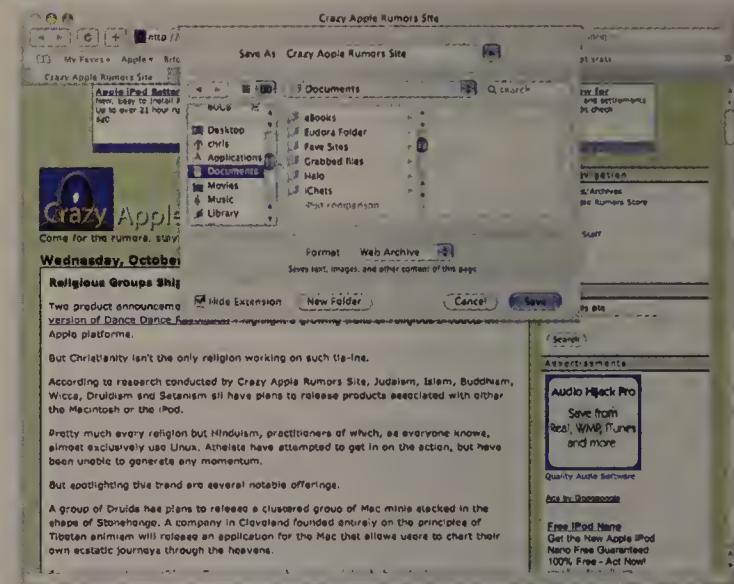
Note that the iPod was not designed to be a primary start-up drive. It has no vents, and the heat buildup from running its drive constantly will likely shorten its life. But I've successfully booted an iPod to quickly repair a misbehaving Mac without apparent mishap.



connected to the Internet? That way, I could jump on my next flight, launch Safari, and then browse the fully downloaded pages.

Tyler Moynihan

There are several ways to suck out the contents of a Web site and store it locally. If you simply desire a single page, use your browser's File: Save As command to save it as a Web page, or a *Web archive* in Safari-speak (see "Second Site"). Once the page and



Second Site Want to catch up on your reading when you don't have Internet access? To view just a single Web page offline, use your browser's File: Save As command.

its contents download, you can read it when your Mac's not connected to the Internet.

If you'd like to grab more than just the page you're viewing, you must turn to other tools, such as Microsoft's free Internet Explorer (www.microsoft.com/mac). Use this to navigate to the site you want. Then choose File: Save As and make sure Web Archive appears in the Format pop-up menu at the bottom of the Save window. Click on the Options button, select the Download Links option, and tell the program how many levels deep you'd like it to save. For example, two levels would save the home page

and any pages on that specific site to which the home page links. Click on OK and then on Save. Internet Explorer will download the Web site. To read it later, just open the Web archive.

Rick Cranisky's SiteSucker (free [donations accepted]; www.sitesucker.us) is another good option. In addition to allowing you to set the number of levels it downloads, SiteSucker lets you queue up sites so you can easily grab a number of them. And then there's Limit Point Software's Blue Crab (\$25; www.limit-point.com). It offers more-extensive options than Internet Explorer or SiteSucker—for example, you can instruct it to download HTML files only, to skip images, or to grab pages exceeding a certain number of kilobytes. You can even configure it to enter login information for protected sites.

If you want an even more complete solution and are willing to pay for it, check out Soft Chaos's \$80 Webstractor (; macworld.com/0926)—a utility that, among other things, can automatically capture Web pages as you browse.

Senior Editor CHRISTOPHER BREEN is the author of *Secrets of the iPod and iTunes*, fifth edition, and *The iPod and iTunes Pocket Guide* (both Peachpit Press, 2005).

Photoshop Fling™ 3 & MacMania™ IV

Escape to the good life. Allow yourself to be pampered. Unwind. Have fun. Enrich your mind. And do it all aboard a luxurious cruise ship.

Speakers

Chris Breen
Jack Davis
Bruce Fraser
Janet Hill
Andy Ihnatko
Leo Laporte
Bob LeVitus
Deke McClelland
Bert Monroy
Sal Soghoian
Jason Snell
Mark Swain
Steve Wozniak



Photoshop Fling: Essentials

Photoshop Fling 3 / MacMania 4

During our cruise-conference, there will be four (4) three-day "tracks" offered at the same time:

- Photoshop Fling: Essentials & Effects
- Photoshop Fling: Photography & Workflow
- MacMania: New User
- MacMania: Power User

Attendees may freely move between the tracks, at any time. For example, while Photoshop Fling and the Digital Photography Workshop are independent of MacMania, classes here may be counted toward your MacMania session total. Similarly, Photoshop Fling conference attendees may attend any of the MacMania seminars—at no charge.

Therefore, all attendees may choose any combination of full-day, half-day, or quarter-day seminars—from either MacMania or Photoshop Fling—for a total of three (3) days' worth of sessions.

The conference fee is \$795 and includes all courses, course materials, five evenings of entertainment, and the Ban Voyage Cocktail Party.



Adobe Photoshop CS2 One-on-One

Sunday the 5th, 8:30am – Noon

Speaker: Deke McClelland

Photoshop is a vast and complex program. It does certain things very, very well, and it does others very, very strangely. Using the program effectively is a matter of knowing which tools work best and when best to use them. Attend this introductory class and learn how to use the right features in the right order and save yourself a lot of heartache.

- What Photoshop can do
- Workspace and navigation
- Basic color management
- Highlights, shadows, and midtones
- Adjusting brightness levels
- Fixing a color cast
- Hue and saturation
- Colorizing a grayscale image
- Image size and resolution
- Rotate, crop, and perspective

Filters and Masks

Sunday the 5th, 1:30pm – 5pm

Speaker: Deke McClelland

Newly enhanced in CS2, corrective filters rank among the program's oldest and finest capabilities. Besides permitting you to sharpen the contrast of an image, blur away the defects, and remove digital noise and JPEG artifacts, they can help you hone in on exactly those details that need help the most. Combined with Photoshop's Masking function, filters make it possible to separate even the most complex foreground subject from its background and composite that image into a new setting. Sound amazing? You have no idea.

- Filtering basics
- The new filters in Photoshop CS2

- Unsharp Mask and High Pass
- Removing motion blur with Smart Sharpen
- The wonders of Remove Noise
- Gaussian Blur and Median
- Creating an Edge Mask
- Using the Color Range command
- Extracting image elements
- Blue screen and sky
- Full-on Masking

The Bold and the New in Photoshop CS2

Thursday the 9th, 8:30am – Noon

Speaker: Deke McClelland

Photoshop CS2 is the most ambitious, exciting, and downright seminal update to Adobe's flagship image editor in the past five years. Vanishing Point, envelope-style image warping, floating-point exposure, and the stand-alone Bridge all qualify as flat-out great. Then there's my favorite feature, smart objects, which let you do three things you could never do before: First, you can apply non-destructive transformations. Second, you can replicate a layer and edit all copies simultaneously. And third, you can adjust the composition of imported camera raw and Illustrator layers long after importing them. If flexibility and power appeal to you, join Deke and learn how to make them yours.

- The new Adobe Bridge
- The revolutionary Vanishing Point plug-in
- Combining multiple exposures into a single HDR image
- Applying free-form distortions with warp and envelope
- Making a smart object
- Non-destructive transformations
- Creating alias layers, all linked to a single original
- Placing camera raw and Illustrator artwork
- Modifying placed layers well into the future

& Effects

The Wow Factor:

One-Click Solutions in Photoshop

Thursday the 9th, 1:30pm – 5pm

Speaker: Jack Davis

Quick and easy ways to use Photoshop's built-in presets (and hundreds of complimentary Wow presets that will be provided in class) to create special effects on-time and on-budget.

- The phenomenal power, flexibility, and speed of Layers Styles
- How to create dimensional effects like chrome, rock, and glass (and beyond)—instantly and without filters
- One-click framing and tinting techniques to tie disparate photographs together—separately or as a collage
- Quick template-based collaging for weddings, groups, or editorials
- Single image collages and ghosted backgrounds

Creating Special Effects with Photoshop

Friday the 10th, 8:30am – 5pm

Speaker: Bert Monroy

Creating realistic textures, the effects of lights and shadows, and the ability to make an image jump off the page will be covered in this session. Filters? There are many of them in Photoshop. What happens when you use them for other than their intended purpose? What happens when you put a few of them together? You will create images that are more realistic than a camera could ever achieve.

The ability to bend things on a curve has been one of the most asked-for features, yet it has always been there. Bert will demonstrate the use of the Displace Filter to make controlled, fluid distortions. The Liquify Filter will also be explored for distortion effects. Distorting with the Transform function will be explored for perspective matching and the creation of realistic reflections.

- Working with Filters
- Using the Liquify command
- Light and shadows
- Reflections
- Integrating Photoshop into other programs
 - After Effects
 - 3D software

The Evolution of Digital Art

Speaker: Bert Monroy

Bert Monroy embraced the Mac as an artistic medium with the introduction of the Mac 128 in 1984. In this evening talk, open to all, Bert will take you on a journey through the evolutionary transformation of the Mac from its beginnings with MacPaint to its current status as the preferred tool of graphic artist throughout the world.

A history lesson mixed with useful production techniques will leave you not only entertained but a little more attuned to the potential that lies within our favorite little box.

You will learn:

- How the first computerized comic book was produced
- How the Mac has revolutionized the graphic arts industry
- How the Mac is used in the motion picture industry
- Much, much more

You will leave this talk, not only with some new found skills, but with the inspiration to explore new avenues you never before considered.

Photoshop Fling: Photography & Workflow

Expert Color Management

Sunday the 5th, 8:30am – Noon

Speaker: **Bruce Fraser**

Learn everything you ever wanted to know but were afraid to ask about color management. We'll start with a look at the basic science that underpins color management—don't worry, the session is guaranteed equation-free—because doing so helps you understand not only how color management works, but also why it sometimes fails to do so.

Next, we'll look at profiles, and their relationship to the devices they represent, with a view to developing sound troubleshooting skills.

Last but not least, we'll delve deep into Photoshop's color management features, mine the mysteries of working spaces, and look at what it takes to build and maintain a complete capture-to-output workflow.

Real World Camera Raw

Sunday the 5th, 1:30pm – 5pm

Speaker: **Bruce Fraser**

With the advent of Camera Raw 3.0, I look at Photoshop as a plug-in for Camera Raw, rather than the other way around. In this session, you'll learn the many benefits of shooting raw. Then you'll learn to exploit the vast amount of information raw files contain by making use of Adobe Camera Raw's powerful features, so that when your images land in Photoshop, you'll have very little to do to them except press Save and choose a file format.

Possibly the greatest challenge that digital shooters face is the sheer amount of data they generate. You'll learn that the key to avoiding drowning in data is to master metadata and make it your friend. You'll learn how to build a complete digital raw workflow using Bridge, Camera Raw, and Photoshop using automation wherever possible so that you still have time to shoot, and to have a life.

Essential Photo Optimizing—

Getting it Right

Thursday the 9th, 8:30am – Noon

Speaker: **Jack Davis**

The experienced user knows there are a million tools in Photoshop to adjust your images for maximum impact, but which ones work best, work fastest, and are most "photographer friendly"? In this session you will learn all sorts of workflow-enhancing techniques including: 101 uses for Auto Levels, how to create non-destructive dodge and burn layers, advanced gray-scale conversions, eyedropper color correcting, stained teeth whitening, red-eye neutralizing, blotchy skin unifying, and the only way to use Photoshop's healing brush—all with an emphasis on quality, flexibility, and speed.

- Which editing tools are best to use when fixing images—and which ones to avoid
- Quick tone and color adjustments that leave your original image intact
- How to quickly fix under and over exposed images using Photoshop features like Shadow/Highlight
- Creating nondestructive, fast, and flexible repair layers for fixing, dodging and burning, and color correcting
- Simplified levels, curves, and sharpening techniques
- Advanced gray-scale conversions using Channel Mixer

Editing Images in Photoshop

Thursday the 9th, 1:30pm – 5pm

Speaker: **Bruce Fraser**

Photoshop has so many image editing options that it's often hard to know where to start, and once you've mastered a few tools, you tend to use them for everything (when all you have is a hammer, everything starts to look like a nail).

We'll start with basic adjustments like Levels, Curves, Hue/Saturation, and Shadow/Highlight, possibly turning up some hidden goodies you may have overlooked. Then we'll progress to how these basic adjustments can be modulated and controlled using layers, layer masks, and blending modes.

We'll look at strategy as well as tactics. Do I build a monster layered file that lets me keep all my options open, or do I use History instead? Last but not least, we'll delve into detail control—dustbusting, blemish removal, and sharpening.

Please see previous and following pages for more info!

For complete travel and booking information see our website:

www.GeekCruises.com/MacMania



Digital Photography Workshop

Speaker: **Jack Davis**

Learn the secrets of digital photography on our Mexican cruise. In this full-day class you'll quickly discover how to become a better photographer and tap the benefits of your digital camera. This Digital Photography workshop will give you the power to capture special moments and preserve precious memories—for snapshots to put in an album or oversized prints suitable for a gallery!

Learn how to:

- Tell beautiful, visual stories by capturing great digital photos
- Use natural light and flash the right way
- Use your camera's menus and functions to optimize what your camera can do
- Tap the value of a digital camera's features such as exposure compensation, scene modes, and when to shoot RAW

Part 1: Light, Camera, Action

Friday the 10th, 8:30am – Noon

Light is the primary subject of all of our photographs. In this illuminating, four-hour session we'll discuss the properties of light (and how it relates to space, depth, and focus) and how to use an understanding of light plus the various camera controls and features to produce technically-proficient photographs from the subtle to the dynamic.

- Understanding the properties of light
- Effective use of traditional camera controls
- Metering and exposure
- F stop/depth of field
- Shutter speed/motion control
- ISO
- Understanding digital camera menus
- Resolution
- File formats—RAW and JPEG demystified
- White balance
- Tone control
- Sharpening
- Putting it all together when shooting pictures

Part 2: Making Better Photographs

Friday the 10th, 1:30pm – 5pm

How do you put a little bit of soul into your pictures? Having control of your equipment is necessary, but only the first step. In Part 2 of this Workshop we will discuss how to move beyond technically well-executed documentation photography to exciting images that allow us to share, in an artful and memorable way, the experience of the moment we chose to record.

- Human vs. camera vision
- Perspective and point of view
- Camera position and lens choice
- Understanding the frame
- Organizing the visual elements
- Keep it simple and the use of negative space
- Design tools for "drawing" the photograph
- Clues to three-dimensionality
- Exploring the subject
- Photographing people
- Travel photography techniques
- Close-up photography techniques



MacMania Ingenious Bar: The Near Genius IS IN!

(Every evening, 5pm to 6pm)

Apple stores may own the rights to the name "Genius Bar," but at sea our own near geniuses will be ready to help you get up and running on Macintosh at the MacMania Ingenious Bar. Leo Laporte, Cap'n Neil, and many of our onboard luminaries will gather to offer informal one-on-one assistance from 5pm to 6pm every evening in the Crow's Nest. If the MacMania seminars are leaving you feeling like a sub-genius, visit the Ingenious Bar for an instant upgrade. These sessions are also designed for spouses and family members who aren't yet Mac geeks but are ready to learn more in a friendly, nonjudgmental environment—so everyone is welcome.

The MacMania Ingenious Bar: no problem too small, no broins too big.



MacMania: New Users

The Ground Floor Guide to the Macintosh

Sunday the 5th, 8:30am – Noon

Speaker: **Andy Ihnatko**

"Honestly, I don't know the first thing about Macs."

Oh, really? Sure, it's easy to brag about how little you know about these things, but so few people are willing to put their money with their mouth is. Attend this session and silence all the nay-sayers. How basic is this session? Turning the Mac on and off is lesson two. Sure, by the end, you'll no longer be a novice...but you'll be able to thrill and amaze people with your tales of compressing a whole month's worth of trial-and-error learning into one single class.

The Dilettante's Guide To Tiger

Sunday the 5th, 1:30pm – 5pm

Speaker: **Andy Ihnatko**

There are American History books that spend 500 pages covering the whole thing from start to finish, and then there are the ones that cover just one thing in obsessive detail. The latter leaves you with ready answer to the question "So: the quill that Jefferson wrote the Declaration of Independence: what species of bird did it come from?" But the former approach leaves you with a broad understanding of absolutely everything, and the relationship between all of the various bits.

So the goal of this session is to make sure you know just exactly what Mac OS X is capable of, from user-level features that you'll use every day to aspects of Unix system administration that will make you glad that you're free to never ever ever touch that sort of stuff if you don't want to, not even with a ten-foot-pole strapped to a twelve-foot-pole.

Mac OS X Troubleshooting

Thursday the 9th, 8:30am – Noon

Speaker: **Christopher Breen**

The Mac and its accompanying operating system are impressive accomplishments but even Macs sometimes get the blues. Join Chris Breen as he shows you how to keep your Mac and OS X on the straight and narrow and, should it stray from that path, how to get it back on its feet with the least amount of fuss. Along with preventive and troubleshooting strategies, Chris will offer tips for dealing with such common annoyances as spam, Mac/Windows interaction, and printing problems.

Life is Good...iLife Makes it Better!

Thursday the 9th, 1:30pm – 5pm

Speaker: **Janet Hill**

If you are new to iLife, come see what happens when you take five best of breed multimedia applications—iTunes for managing music, iPhoto for digital photography, iMovie HD for editing digital video, GarageBand for creating your own music, and iDVD for creating your own DVDs—and integrate them so they work seamlessly. Suddenly it all connects!

Let your imagination soar: The iLife '05 software applications let you do fun, creative things with your pictures, music, and movies in ways that PC users can only dream about—then you share your joy with family and friends every which way from email and the internet to print and DVD. And you can do all these things and more, quite nicely, without thumbing through a manual.

A Day of iLife '05 Exploration

Friday the 10th, 8:30am – 5pm

Speaker: **Janet Hill**

Learn why this suite of tightly-integrated applications continues to lead the digital-media revolution.

You have been using iLife for a while but what can you really do with this program? With iLife '05 you can easily create stunning softcover books; import, organize, and edit RAW photos; and stun them with fully-customizable slideshows using iPhoto 5. Edit high-definition 16:9 video from the newest camcorders and create movies automatically with iMovie HD's new Magic iMovie feature. Drag and drop video clips, pictures, and music into the new animated drop zones found in iDVD 5 templates. Or create multi-track recordings in GarageBand 2. Of course, iTunes seamlessly integrates with iPhoto, iMovie HD, iDVD and GarageBand and syncs with every member of the iPod family. Come spend a day exploring the many intermediate features of iLife '05.

Please see previous and following pages for more info!

For complete travel and booking information see our website:

www.GeekCruises.com/MacMania

MacMania: Power Users

Power-User Productivity in OS X Tiger

Sunday the 5th, 8:30am – Noon

Speaker: **Bob "Dr. Mac" LeVitus**

What is a Power User? According to Dr. Mac's Really Abridged Dictionary: Power User (pou'er yoo'zer) n. 1. Someone who uses a Macintosh better, faster, or more elegantly than you do. 2. Someone who can answer Macintosh-related questions you can't.

Don't miss this unique opportunity to spend some quality time with "one of the world's leading (self-proclaimed) authorities on Mac OS X," and the author of *Mac OS X 10.4 Tiger For Dummies*. The session will feature a myriad of tips, hints, tutorials, shortcuts, product demos, timesaving software recommendations, where to find what you need on the Web, and much more.

Automator

Sunday the 5th, 1:30pm – 5pm

Speaker: **Sal Soghoian**

Mac OS X version 10.4 Tiger introduces Automator, a new application that automates anything on your computer quickly and easily. Using the power of Mac OS X, Automator controls your applications and files, automating—in an instant—what you need done with them. Automator will change the way you use your Macintosh. There's no scripting or coding, it's drag-and-drop easy. It's truly "Automation for the rest of us!"

Automator Product Manager, Sal Soghoian, gives you a personalized tour of this innovative application and you'll learn when and how to use Automator to make automating complex or repetitive tasks a breeze!

The MacMania Trio

Classic Jazz and Rock'n Roll

Performed by MacMania Speakers

**Andy Ihnatko, Chris Breen,
and Bob LeVitus**

AppleScript Fundamentals

Thursday the 9th, 8:30am – Noon

Speaker: **Sal Soghoian**

Now that you can "automate" your tasks, are you ready to look under the hood? In this session, you will gain a thorough understanding of the fundamentals used to create real-world AppleScript scripts. Step-by-step, practical approaches and techniques are reviewed in detail with plenty of snippets to aid you in developing a solid foundation in script writing. Sal provides insight and examples gleaned from over a decade of scripting the Mac OS and its core applications. Special attention is paid to new AppleScript tools and abilities found in Mac OS X Tiger.

Living the iLife

Thursday the 9th, 1:30pm – 3pm

Speaker: **Christopher Breen**

There's a lot of power hidden under the placid exterior of Apple's digital media suite, iLife 05. Chris Breen goes beyond the basics and reveals his favorite iMovie, iDVD, iPhoto, GarageBand, and iTunes tricks. Among them, you'll learn how to use iMovie to add multiple playlists to your iPod shuffle, create an inescapable kiosk presentation with iDVD, manipulate iPhoto's expert sharing settings to make smaller (and better looking) slideshows, make GarageBand play the blues, and alter audio files in iTunes so they take up less space on your iPod.

Mac Gems Shootout with Leo Laporte, Bob LeVitus, and the Woz

Hold on to your hat and don't miss this once-in-a-lifetime shootout featuring three of the most fanatical Mac maniacs in the universe—Leo, Bob, and Woz. Thrill as they demonstrate and praise their favorite and most-beloved shareware, freeware, and otherware. Then, once the smoke clears, grab a copy of any or all of these fabulous gems at the GeekCruises website. Don't miss it!

Advanced iMovie: Beyond the Birthday Party

Thursday the 9th, 3:30pm – 5pm

Speaker: **Christopher Breen**

We understand that with a minimum of effort you can import video from your digital camcorder into iMovie and string together enough scenes to make a darned fine home movie, but is iMovie nothing more than the means for making less-boring videos of your kid's 10th birthday bash? Hardly. In Advanced Movie: Beyond the Birthday Party, Chris Breen will show you how to bend iMovie to your will to make dynamic video vignettes that include blue screen effects, picture-in-picture tricks, and sound effects that add realism (and a heapin' helpin' of humor) to your work.

Final Cut Express and Final Cut Pro: A Step Up

Friday the 10th, 8:30am – Noon

Speaker: **Mark Swain**

There is no doubt about it, iMovie is a quick digital editing solution with loads of features. However, if you have outgrown iMovie's feature set, this is a great session that will take you inside the world of Final Cut. This guided tour starts off with getting you comfortable with the Final Cut interface and work flow. Learn the basics of non-linear editing, how to handle footage, and the ins and outs of video footage. Explore advanced editing tools such as ripple, roll, and slip edits. Also, figure out which version of Final Cut is right for you when we examine the differences between Express, and Professional versions. This session will take you from raw footage to finished video with little or no previous Final Cut experience.

GarageBand 101: So You Want To Be a Rock 'n Roll Star

Friday the 10th, 1:30pm – 5pm

Speaker: **Bob "Dr. Mac" LeVitus**

If you want to make music with GarageBand, this session is the perfect first step. The premise is to record, mix, and master a complete rock and roll song—using guitar, bass, drums, and vocals—in 3.5 hours or less.

Along the way you'll discover cost-effective hardware products that make using GarageBand better; how Apple Loops can save you time and effort; how to record vocals and acoustic instruments that sound awesome; using GarageBand's software instruments effectively; and lots of other cool stuff guaranteed to help you produce better sounding music with GarageBand.



Other Evening Entertainment

The Woz Hour

Join Apple co-founder Steve Wozniak while he reminisces, answers your questions, and explores our future.

Macworld/Apple Q&A

Got a question about Apple or the Mac? This is your chance to get the *real* skinny from the experts! Macworld Editorial Director Jason Snell and Apple's Sal Soghoian and Janet Hill answer your questions with the benefit of their years of first-hand experience in the Mac world.

Andy Ihnatko—The Wild Side



PRICING AND BOOKING INFORMATION

Course Fees: \$795. Only passengers booked through Geek Cruises will be admitted.

Deposit: \$400 per person, due at time of booking.

Cabin Type Cruise Rate

Standard Inside	\$ 799 (GS* available)
Better Inside	\$ 899 (GS* available)
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Foreign Shipping Fees and Additional Payment Information: There is a foreign shipping charge of \$60 (to cover the shipping of your cruise tickets, via FedEx) per foreign residence (\$35 per Canadian residence). There is a \$25 charge for returned checks.

Air Add-ons: Airfare from most major cities is available through the cruise line. You can call our office for this pricing. (These rates include transfers to/from the dock/airport plus transfers to/from your hotel if we've booked the hotel as well.) In most cases, however, you will find better airfares on your own. Online travel sites such as Expedia.com, or Travelocity.com are excellent resources.

Pre- and Post-cruise Hotel Stays:

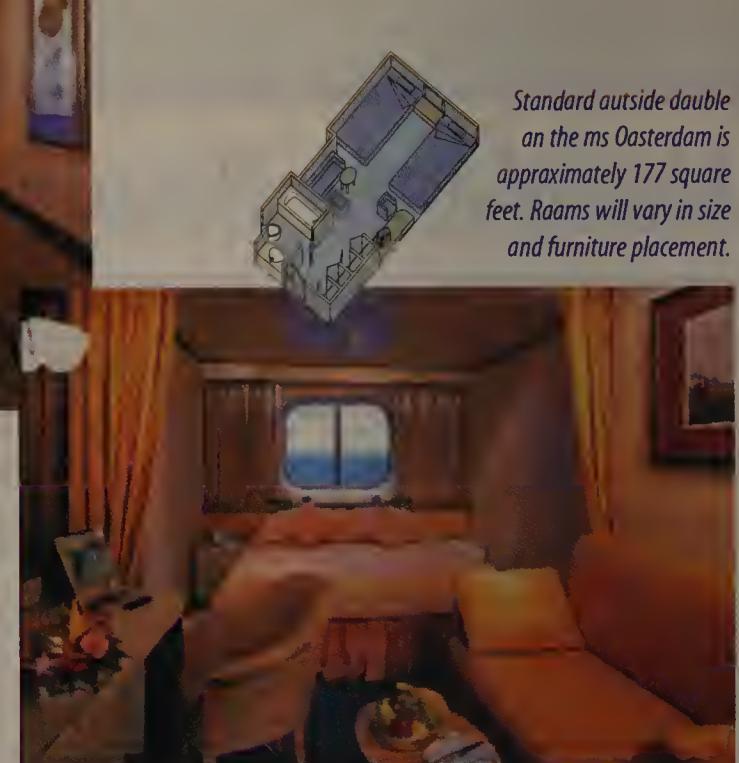
Sightsee San Diego! The hotel (Westin Horton Plaza San Diego) will be close to the dock. If we book your hotel, transfers from the hotel to the dock are included.

	1 night	2 nights	3 nights
Shared double	\$150	\$275	\$400
Single	\$275	\$525	\$775
3rd/4th person	\$50	\$80	\$110

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http://www.GeekCruises.com/booking/mm04_booking.htm



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DAY	PORT	ARRIVE	DEPART	CONFERENCE SESSIONS
Saturday, Feb 4	San Diego, Ca	—	5:00pm	7:15pm, Bon Voyage Cocktail Party
Sunday, Feb 5	At Sea	—	—	8:30am – 5:00pm & 6:00pm – 7:30pm
Monday, Feb 6	Cabo San Lucas, Mexico	7:00am	6:00pm	6:00pm – 7:30pm
Tuesday, Feb 7	Mazatlán, Mexico	8:00am	6:00pm	6:00pm – 7:30pm
Wednesday, Feb 8	Puerto Vallarta, Mexico	8:00am	10:00pm	—
Thursday, Feb 9	At Sea	—	—	8:30am – 5:00pm & 6:00pm – 7:30pm
Friday, Feb 10	At Sea	—	—	8:30am – 5:00pm & 6:00pm – 7:30pm
Saturday, Feb 11	San Diego, Ca	8:00am	—	—



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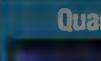
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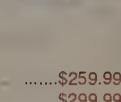
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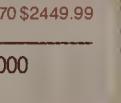
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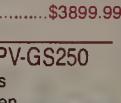
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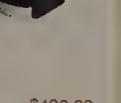
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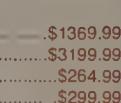
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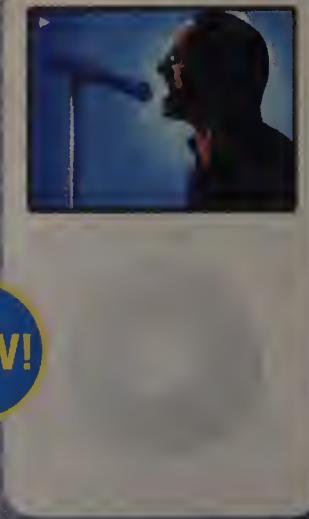
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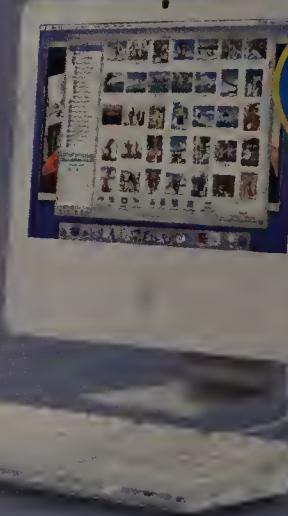
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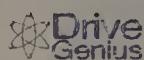
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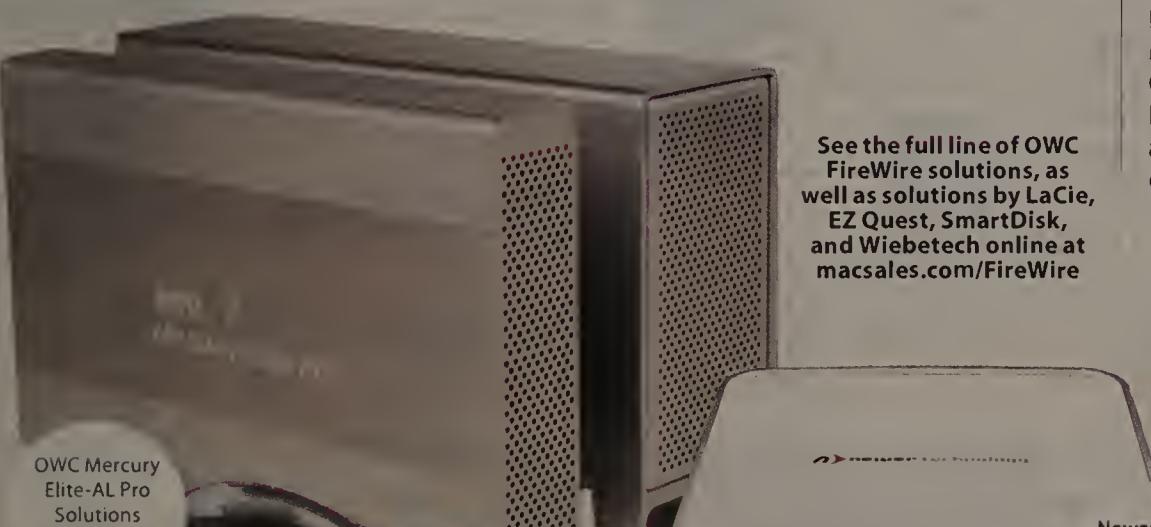
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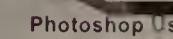
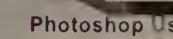
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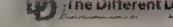
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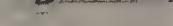
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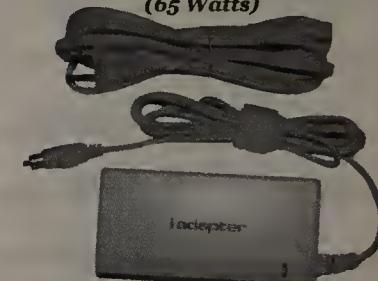
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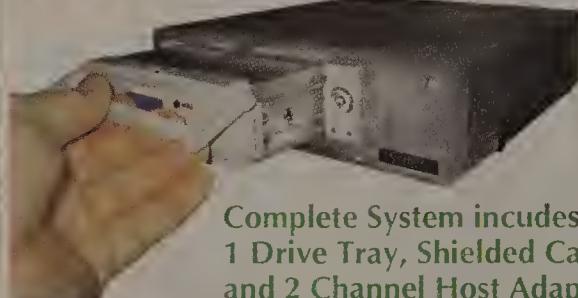
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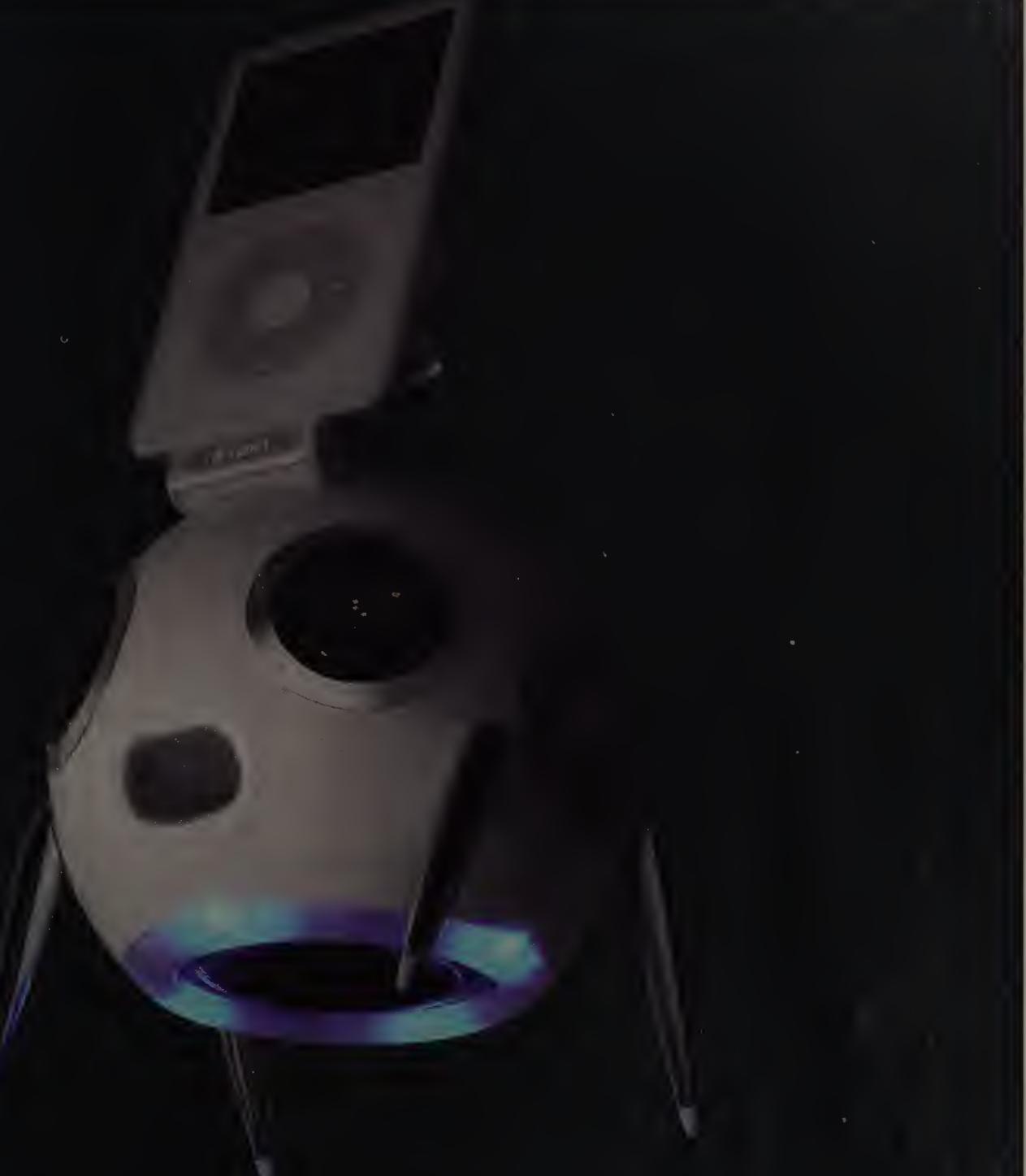
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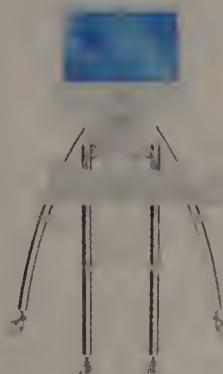
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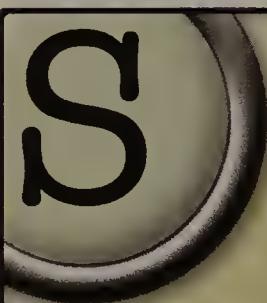
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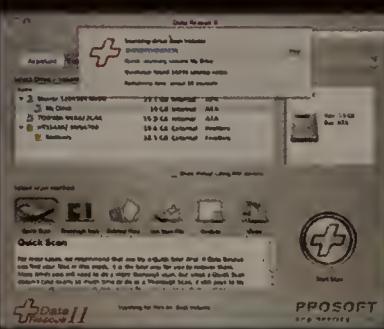
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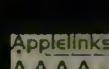
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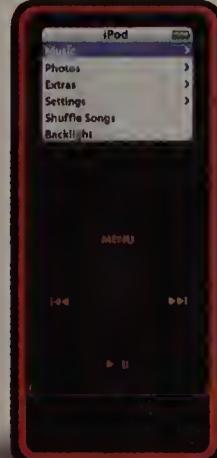
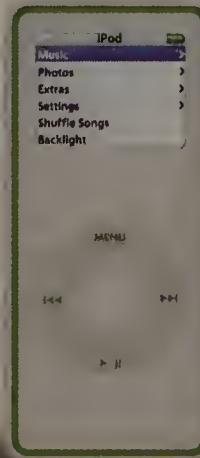
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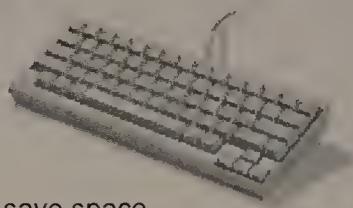
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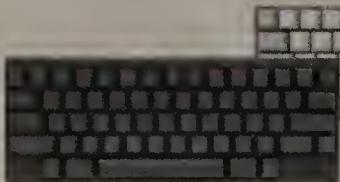
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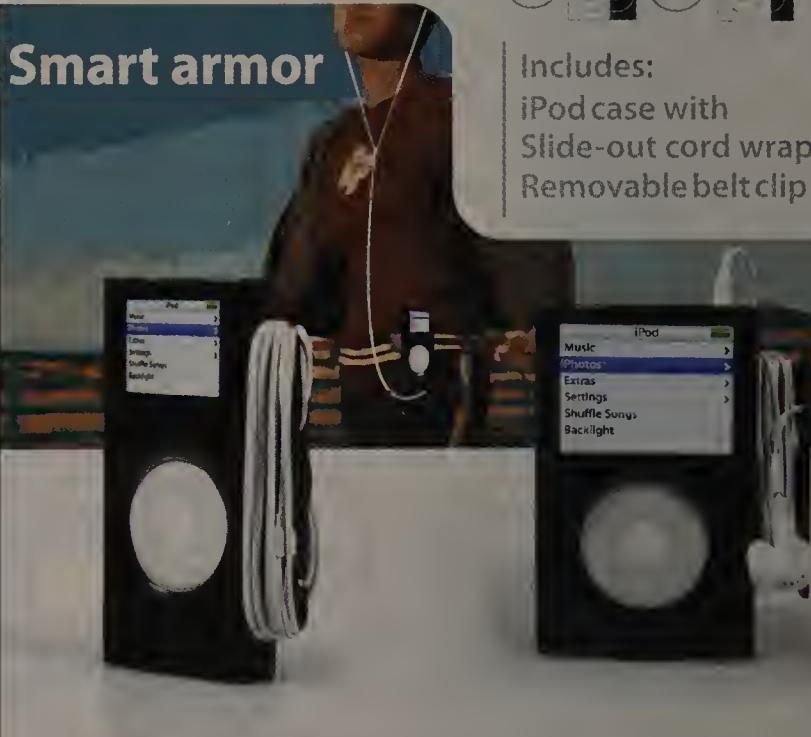
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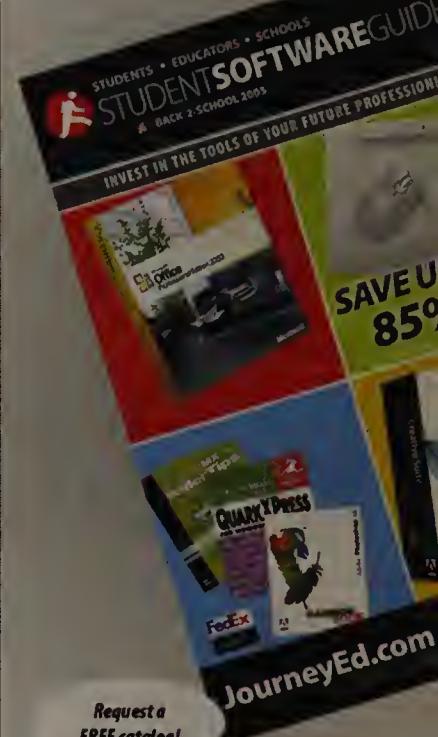
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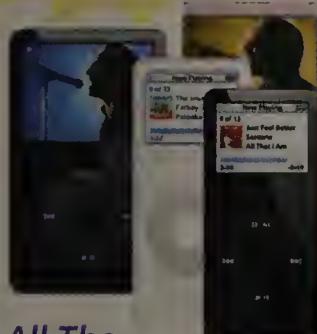
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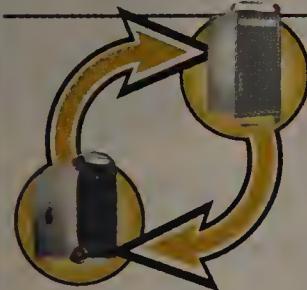


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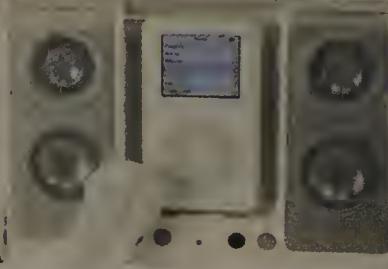
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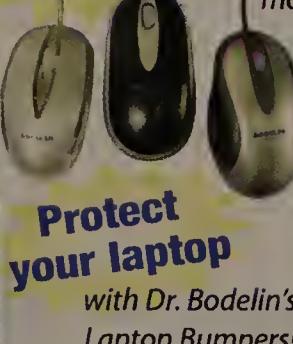
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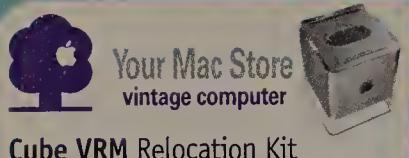
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FROM THE EDITORS OF MACWORLD



Class-T Amp

Sonic Impact's Class-T Amp has been the talk of music lovers lately. The online buzz is that this unassuming little \$30 amplifier sounds as good as amps that cost 20 times as much. I'm no audiophile, but when I hooked up my iPod and Cambridge SoundWorks bookshelf speakers to the Class-T Amp and cranked up its volume, I was blown away—it sounded plenty sweet to my ears. And the price for this 15-watt-per-channel amp is pretty sweet, too (www.si-5.com).—DAN MILLER

Painter Essentials 3

As an amateur shooter, I rarely see a landscape, a flower, or an animal that I don't want to photograph. But sometimes a painting would express my artistic vision better than a clear photo. Corel's \$99 Painter Essentials 3—a stand-alone (and updated) version of a program that was previously bundled only with hardware such as scanners and

tablets—gives me the best of both worlds. It lets me turn my photos into unique paintings, is great for all skill levels, and gives me just the right amount of artistic control without making me slog through more-complicated painting tools such as the tools in Painter (www.corel.com).—JACKIE DOVE



Before



After

NextBus Google Maps

The NextBus Web site is a great way to find out exactly

when, just for example, the next outbound N-Judah streetcar will arrive at the San Francisco Giants' baseball stadium (or to get information about stops on various public-transportation systems in 12 states). But with the test version of Google-based NextBus maps up and running, you can also see the position, direction, and arrival times of your chosen line's buses and railcars on detailed maps, thanks to GPS-enabled vehicles and Google Maps' precise satellite imagery (www.nextbus.com).—JONATHAN SEFF



WHAT'S HOT

Brought to you by John Moltz of the Crazy Apple Rumors Site (www.crazyapplerumors.com)

- 1 Apple patents technology rumored to prevent people from running OS X on non-Apple hardware. No word yet on how the company plans to deliver electronic wedges to people who try to circumvent its protections.
- 2 Some analysts speculate that the first Intel-based Macs—possibly new iBooks—will be released as early as January's Macworld Expo. In response, Apple announces that it already has plans for that week.
- 3 Apple's sales numbers indicate that more than a million Windows users have switched to the Mac in the last three quarters. Unfortunately, they're using OS X's multiple-user features to share seven iMacs.
- 4 A new video-dating Web site—PodDater.com—takes advantage of the latest iPod. A companion site will provide Podcast-formatted breakups.



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PODNER

I really enjoy watching video on my new iPod, but creating files that will play on it can be confusing and time-consuming. So I've started using Splasm Software's \$10 Podner, which provides pre-sets for iPod-compatible H.264 and MPEG-4 encoding, an image-quality slider, a batch processor, and the ability to set the genre and name of files and have Podner save them directly to iTunes. The best part is, you don't need the \$30 QuickTime Pro (which gives you QuickTime's export capabilities) for Podner to work. It's the best app I've found so far for converting files on my Mac to work with the new iPod (www.splasm.com).—JONATHAN SEFF



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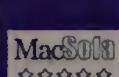
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\$499*

- Output that resists fading for up to 108 years¹
- Realistic skin tones with 9-ink color
- Supports oversized output up to 13 in x 19 in



HP DESIGNJET 90
SERIES PRINTER

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\$995*

- Output that resists fading for up to 82 years¹
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¹Estimated U.S. retail price, actual price may vary.

²Based on Wilhelm-Research.com testing (visit www.wilhelm-research.com for full details) for similar systems. For the HP Photosmart 8750, fade resistance is up to 108 years under glass or over 200 years in a photo album using the HP Tri-Color, the HP Gray Photo and the HP Blue Photo Inkjet Print Cartridges on HP Premium Plus Photo papers. For the HP Designjet 90 and HP Designjet 130, fade resistance is up to 82 years under glass or over 200 years in a photo album using the HP No. 85 Ink Cartridges on HP Premium Plus papers. For more information on additional permanence testing factors, visit <http://hp.com/go/premiumplusphoto>. Mail-In Rebate available for HP Designjet 130 and Designjet 90. Availability, eligibility dates for and amount of rebate subject to change. Connecticut residents not eligible for mail-in rebate. For full details and program terms and conditions, visit www.hp.com/go/djhotdeals19. © 2005 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. Some of the images are simulated.